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DEPARTMENTS

Editorial

WHY LINGUISTIC INSTITUTES?

There is an urgent national need for trained linguistic scientists. Right now the shortage of competent linguists is so great that government agencies and foundations are desperate for people who can direct English-teaching programs in foreign countries, carry on investigations in hitherto unanalyzed languages, train foreign linguists, and prepare teaching materials.

At home the situation is equally critical. Linguistic scientists have been persuasive in their insistence that their discipline can be of great service to the teaching of English, the teaching of foreign languages, the teaching of English as a foreign language, and in fact in teaching reading and literature itself. The actual application of linguistic techniques in most of these areas is lagging simply because people cannot be trained rapidly enough to meet the call upon their services.

These developments of the past four or five years have given a new importance to the summer Linguistic Institutes. Originally begun in 1928, four years after the founding of the Linguistic Society of America, which co-sponsors them, they first served the purpose of assembling a larger staff and a more comprehensive series of offerings in linguistic subjects than any single institution could conceivably afford during its regular academic sessions. With the development of departments of and programs in linguistics at a number of major universities in this country, this is no longer quite so important a consideration as it used to be.

Recent linguistic institutes, however, have developed a number of noteworthy features which in themselves indicate some of the directions which the science is taking and constitute somewhat different foci of interest for the newcomer to linguistics. In the first place, most institutes of the past few years have stressed the interdisciplinary contacts of linguistics, either through a seminar which brings together

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linguists and a group representing some other discipline — anthropology, sociology, psychology, literary criticism, etc. In addition, since 1936 the application of linguistics to specific fields of teaching (foreign languages, English, etc.) has been a feature of many linguistic institutes. Finally, the application of descriptive and structural techniques to historical linguistics has received considerable emphasis. All of these features will be included in the 1956 Linguistic Institute, which is to be held at the University of Michigan.

These developments are significant in terms of the potential clientele of the institute, which in turn will have a direct bearing on the manpower shortage in Linguistics. As the institutes are now constituted, they afford a convenient opportunity for those not originally trained in linguistics to acquire the background and tools to apply linguistics to the fields of specialization in which they were trained. For those whose previous experience has been chiefly in linguistics, and particularly in its theoretical phases, they indicate useful areas of practical application. And as the general scope of the institute curricula widens, this serves to bring together people with a greater diversity of background, making for a livelier and more productive exchange of approaches, techniques, and experiences.

The growing demand for language skills on the part of large sectors of our people, owing to what is often called the communications revolution, combined with the increased strain on our educational facilities because of a larger population, create pressing problems which linguistics, if intelligently developed and applied, can do much to solve. At most we have a period of perhaps two or three decades to bring linguistic techniques to bear upon these problems. The Linguistic Institutes constitute an important resource in meeting the current need.

<div align="right">Albert H. Marckwardt
University of Michigan</div>

AMERICAN LINGUISTICS
AND THE TEACHING OF ENGLISH

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(The following article originally appeared in *Revue des Langues Vivantes,* XXI (1955). Summarizing points made in Professor Fries' talks to teachers of English during his recent trip to Germany, it reviews certain aspects of structural linguistics as recently developed in the United States that have special significance for the teaching of English as a foreign language.[1] We are grateful for the opportunity of presenting it here.)

I. American Structural Linguistics

1. In general the scientific study of language as practiced in the United States throughout the 19th century was based upon and did not depart greatly from that of the long line of European scholars in historical-comparative linguistics, in phonetics, and in linguistic geography. In contrast with these linguistic activities, however, much of what we now call our "Structural Linguistics,"[2] with its beginnings just after the first World War seems to have had a somewhat independent development and differs in some respects from the structuralism of the Cercle linguistique de Prague and from that later developed in the Cercle linguistique de Copenhagen.

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[1] The same principles have equal significance for the teaching of other foreign languages.

[2] Some still speak of "Descriptive Linguistics" as opposed to "Historical Linguistics" and equate "Structural Linguistics" with "Descriptive Linguistics." It is true that our "Structural Linguistics" *arose in connection with the descriptive analysis of living languages,* but its principles and new insights have significance for the complete range of linguistic data and are now providing a basis for very fruitful restudy of much of our historical evidence. (See the work on the Phonemes of Gothic, on the development of the phonemic system of English through Middle English, on the rise of new consonant clusters in English, on the development of a new system of structural signals in English.)

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Certain beginnings of the views that characterize our Structural Linguistics appear in statements from Edward Sapir, in his book *Language*, published in 1921. They are statements concerning his experience when he was trying to record, analyze, and describe some of the American Indian languages.[3] Structural linguistics in the United States differs markedly from the somewhat parallel developments in Europe because it arose out of and has always been closely connected with the effort to analyze and describe completely the many diverse and complex American Indian languages still spoken in the United States and neighboring countries — languages whose structures differ remarkably from those of the languages of the Indo-European and other well-known language families.[4] The technical terminology now used in American Structural linguistics came slowly into use after the publication of Bloomfield's book in 1933. The word *phoneme* is but one of these technical words that follow a pattern—morpheme, taxeme, sememe, tagmeme, kineme, grameme, behavioreme, uttereme,—and derives its meaning, *for us* not from its former European use, but from our particular experience in the

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[3] Edward Sapir, *Language* (1921) p. 58, p. 57.

"I found that it was difficult or impossible to teach an Indian to make phonetic distinctions that did not correspond to 'points on the pattern of his language,' however these differences might strike our objective ear, but that subtle, barely audible, phonetic differences, if only they hit the 'points in the pattern' were easily and voluntarily expressed in writing."

"Two historically related languages or dialects may not have a sound in common, but their ideal sound system may be identical patterns."
[4] Very few people outside the United States, and practically no one within the United States, except a few hundred linguists and anthropologists, have any realization of the great number and tremendous diversity of American Indian languages. We know now, for example, that there are, in the United States alone, at least fifty-four different *families* of languages parallel with such families as the Indo-European, the Finno-Ugric, the Semitic-Hamitic, the Sino-Thibetan. In Mexico there are twenty additional families. Just as the Indo-European family has its large number of separate and distinct languages (Russian, German, French, English, Greek, Persian, etc.) so some of these families of American Indian languages have as many as 20 to 30 different languages.

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structural analysis of languages. Many of those who have contributed most to the development of American structural linguistics have been either linguistic-anthropologists as was Sapir or have been linguists as was Bloomfield who spent much time among the Indians studying their languages. Perhaps the one particular publication which could be said to mark especially the beginning of the recent structuralism in the United States is Edward Sapir's "Sound Patterns in Language," which appeared in *Language*, the quarterly journal of the Linguistic Society, in its first volume, in 1925.

2. This "structuralism" of American linguistics has resulted in a changed view of the nature of human language—a changed view of what constitutes the basic functioning units of a language. Consequently it has led to a new understanding of the precise problems involved in learning and in teaching a foreign language. Two important facts that came out of Sapir's early experience [See note no. 3 above] form part of the very foundation of this new view of language.

(a) The *same phonetic differences* may have (and probably will have) entirely different structural values from language to language.

(b) There is power or force in the structural system itself. (The habits that constitute the control of one's native language are not habits concerning items as items, but habits concerning an *ordered system of structural patterns*.) [5]

The following examples may help to clarify these two statements. In English we have the sound of "k" at the beginnings of each of the following words *kill, coal, call*. But these three "k" sounds are phonetically quite different, i.e. the position at which the top of the tongue touches the roof of the mouth as it stops and then releases the flow of air through the mouth is much farther forward in pronouncing *kill* than it is in pronouncing *coal*. In pronouncing *call* it is still farther

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[5] Modern physcis and chemistry have revealed certain facts concerning the nature of matter which seem to me to offer something of an illustration that may help to understand the significance of these two statements. For example, molecule A may have exactly the same atoms and the same number of atoms as molecule B, but if in molecule A the *arrangement* (the structural connections) of these atoms differs from that of the arrangement in molecule B, then the two molecules will have entirely different properties.

back. In English this phonetic difference in the three "k" sounds is mechanically bound with the particular vowel that follows the " k", and is a phonetic difference that is never used to separate words. English speakers find it very difficult to make and even to hear these differences in the "k" sound without attaching it to the different vowels. On the other hand in a number of Dravidian languages these differences of position in making " k" sounds are not attached to particular vowels, and are used to distinguish different words. The *same phonetic differences* of the three positions of forming these "k" sounds *have entirely different structural values in English and in Tamil.* More than that, the power or force of the *structural arrangement* of these phonetic differences of "k" in English is so strong that it is exceedingly hard for a native speaker of English, as an adult, to learn not only to make these differences for "k" without connection with their particular vowels but even to hear these differences in the stream of speech.

On the other hand, we in English separate many words solely by means of the phonetic difference of "voicing" a consonant, e.g. s/z, or k/g; race - raise; rice - rise; mace – maize; tack - tag; back - bag; rack - rag. Spanish speakers, trying to learn English, at first find it very difficult to hear and distinguish, in the stream of speech, the words separated solely by the phonetic difference between [s] and [z] and German speakers those separated solely by the phonetic difference between [k] and [g], because for these languages these phonetic differences are not "points on their pattern" as they are for English.

From the point of view of our structural linguistics, the *phonetic* difference between [s] and [z] is only phonetic in Spanish, but in English this phonetic difference is also *phonemic*(structurally significant). In similar fashion the phonetic difference between the kinds of "k" indicated above are only *phonetic* in English but are *phonemic* in Tamil. Phonetic differences are always phonetic differences in any and every language. When phonetic differences are structurally significant in a particular language (e.g. used in the language to mark or distinguish one meaning unit from another) then they are *phonemic* for that language.

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The differentiation of those items of a language that have structural significance from those that have not is not limited to a consideration of the sound system only, but runs through an analysis of all the other levels of linguistic phenomena. In other words, we have generalized the views that first grew up in connection with our dealing with language sounds and applied the principles to our analysis of intonation, of grammar, of context, and even of non-linguistic behavior.[6]   This extending of the same principles to other linguistic matters shows itself in the creation of two new words by cutting off the portions of the words *phonetic* and *phonemic* that have to do with "sounds," leaving simply *etic* and *emic*. Every aspect of human behavior can thus be approached from an *etic* point of view, i.e. considering the items as items, or from an *emic* point of view, structurally, i.e. seeking the functioning patterns in a particular society.

3. This structural approach to language *does not ignore meaning of any kind.*   It attempts to sort out the various kinds or levels of meanings and to discover how, in any particular language, each kind or level is communicated from one individual to another.[7]

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[6] See the new book by Prof. Kenneth L. Pike, *Language in Relation to a Unified Theory of the Structure of Human Behavior.* (The first part of a preliminary edition of this book has just been published.) Some of us have also been giving considerable attention to the application of the principles of this new approach to various matters of literary criticism and to the historical study of language and culture.

[7] The following quotations from L. Bloomfield are pertinent.

"To put it briefly, in human speech, different sounds have different meanings.   To *study this coordination of certain sounds with certain meanings is to study language.*" *Language*, (1933), p. 27.

"Until our knowledge of acoustics has progressed far beyond its present state, only the latter kind of record [a record in terms of phonemes] can be used for any study that takes into consideration the meaning of what is spoken," *Language*, (1933), p. 85.

"Only in this way will a *proper analysis* (that is, *one which takes* account of the meanings) lead to the ultimate constituent morphemes." *Language*. (1933), p. 161.

See also C.C. Fries, "Meaning and Linguistic Analysis," in *Language*, XXX, 1954, pp. 57-68.

In our discussions here, since we shall be especially concerned with our structural linguistics in connection with the practical matters of language teaching, it will be necessary to limit our consideration of the problems of meaning and to put emphasis upon those matters that have especial significance for the stages of language learning covered by the schools. Here then we are primarily concerned with language in its social role of making possible the sharing of experience, of procuring cooperation between the members of a group. It is language *as sets of signals* which, consciously given by one individual, produce predictable responses of recognition or action in another individual or individuals. [8] Three layers or kinds of meaning signals are of especial importance for our purpose here.

(A) The signals by which one lexical item is distinguished from another.[9]

Phonemes are one set of functioning markers by which differing lexical items are recognized.

      (1) The top of this pen was bent over
      (2) The top of this pin was bent over
      (3) The top of this pan was bent over
      (4) The top of this pan was sent over

The differences of meaning of sentences (1), (2), (3),above depend on the different lexical items *pen, pin, and pan,* in each. Here the different lexical items are identified by the contrast of the single functioning markers, [ɛ] [i] [ae].

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[8] I would define a language then as follows (See C.C. Fries, "Meaning and Linguistic Analysis", in *Language*, XXX, 1954, p. 64):

"A language is a system of recurring sequences or patterns of 'sames' of vocal sounds [or, of course, representation of them in writing] which correlate with recurring 'sames' of stimulus-situation features, and which elicit recurring 'sames' of response features."

The language function is fulfilled only in so far as it is possible to predict the response features that will regularly be elicited by the patterns of linguistic forms.

[9] The establishing of the meanings of the words themselves, as, for example, the work of the great Oxford Dictionary and the period dictionaries that are following it, and the describing of the lexical sets by which the precise meaning is selected out of many had to be given very brief treatment because of the limitations of time.

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The difference of meaning of sentence (3) and sentence (4) depends on the difference of the lexical items *bent* in (3) and *sent* in (4). These lexical items are separated by the contrast of the single functioning marking units [b] and [s].

(B) The signals by which certain structural meanings are distinguished.

Sometimes the signals of structural meanings are intonation (contrastive pitch sequences), sometimes contrastive order or position, sometimes contrastive word forms, sometimes function words.[10]

The difference of structural meaning in the following pair of sentences—that sentence (a) is a statement, and sentence (b) a question—is signalled by the contrast of position or order.[11]

(a) Mr. Smith is a young man

(b) Is Mr. Smith a young man

The difference of structural meaning in the following pair of sentences—that sentence (a) is a statement, and sentence (b) is a question—is signalled by the function-word do.

(a)   The students swim here every Tuesday

(b) Do the students swim here every Tuesday

In sentence (a) of the following pair, the clause *which is there* is a "modifier" of the word *class* ; in sentence (b) the clause *which are there* "modifies" the word *books*. The position of these clauses is the same in both expressions. The difference in structural significance is signalled by the difference in the forms *is* and *are*.

(a) The books for the class which is there are ready for distribution

(b) The books for the class which are there are ready for distribution

The difference between the meaning of the following phrases is signalled by the ending *-ing* in (a) as contrasted with the ending *-ed* in (b).

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[10] See C.C. Fries, *The Structure of English*, 1952.

[11] The contrasts here given can depend solely on position or order. The significant intonation curve can be the same in both sentences. See Fries, *The Structure of English* p. 143, and note no. 4 p. 147.

> (a) a water soften*ing* solution
> (b) a water soften *ed* solution

In both phrases the word *solution* is the "head" and the other words are "modifiers." But in the first phrase, with the *-ing* ending on the word *soften*, the meaning is that the *solution* acts upon the *water*; in the second phrase, with the *-ed* ending on the word *soften* the meaning is that the *water* acts upon the *solution*.

The difference in the intonation pattern in the following phrases signals the difference in meaning [12]

> (a) a | mo | ving van (ein Möbelwagen)
>
> (b) a | moving | van (ein sich bewegender Möbelwagen)

In similar fashion the | white house is quite different in

meaning from the | white | house and a | dancing girl is

different in meaning from a | dan | cing girl.

(C) The signals by which various kinds of social-cultural meanings are communicated.

The linguistic meanings of our utterances—the lexical meanings and the structural meanings, to which we give great attention—constitute only part of the total meaning of these

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[12] In this marking of "emic" intonation (i. e. pitch sequences that signal certain structural meanings) four contrastive levels serve to indicate all the essential patterns. These are relative pitch levels, not absolute intervals.

> 1
> 2
> 3   a | mo | ving van   a | moving | van
> 4
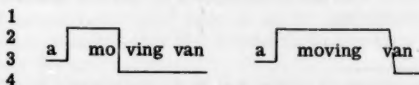
Number 3 represents the usual voice level.
Number 2 represents one step above the usual voice level.
Number 4 represents one step below the usual voice level.
Number 1 (not used here) represents two steps above the usual voice level.

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utterances *as they function practically in a society.*   In addition
to the regularly recurring responses to the lexical items
and to the structural arrangements, there are also throughout
a linguistic community recurring responses to unique whole
utterances or sequences of utterances.   Rip Van Winkle's
simple utterance "I am a poor quiet man, a native of the
place, and a loyal subject of the King, God bless him!" almost
caused a riot, not because of the linguistic meaning signalled
by the lexical items and the structures, but because the unique
utterance as a whole, now, after the American Revolution,
meant to the group that he was a confessed enemy of the
newly established government.   Twenty years before, this
statement would have caused no such reaction.   It would have
meant simply that he was a "good" citizen.   The linguistic
meaning was the same as it would have been twenty years
earlier; only its "social" or "cultural" meaning had changed.
The utterances of a language that function practically in a
society therefore always have both linguistic meaning and
social-cultural meaning.

4. This structural descriptive analysis of language as dis-
cussed here *is not* a matter of just different terminology for
older phonetic and grammatical ideas or meanings.   The new
technical terms that are used have NO EQUIVALENTS in the
older terminology.   "Phoneme" is *not* just another word for
so called "broad" or "gross" phonetic differences as against
"narrow" and "fine" phonetic distinctions.   A "phonemic"
transcription operates on an entirely different basic principle
than does a "broad phonetic" transcription.   "Function words,"
as used in "The Structure of English," are *not* the same as
"empty words" in contrast with "full words" as used by Henry
Sweet and others.   Many "function words" do have lexical
meaning.[13]   The defining characteristics by which the words
of authentic living utterances are recognized as belonging to
Classes I, II, III or IV are *not* those of the usual definitions
of the "parts of speech."   Class III *cannot* be equated with
"adjective" nor Class IV with "adverb" as these older terms
are usually employed.

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[13] See C. C. Fries, *The Structure of English,* pp. 104-109.

II. Linguistics and Language Teaching

1. The new approach to language teaching which has been derived from this new approach to language analysis and description *is not* in any way *limited to the mechanical aspects of language.*

(A) This approach to language teaching does *not* in any way *narrow our view* of what has to be done in order to learn a language well. It assumes that *the fundamental purpose or objective of language teaching is to achieve an understanding, as complete as possible, between people of different linguistic backgrounds.* It furnishes a systematic method of finding out the functioning patterns of not only the sound segments of a language, but also of its rhythm and intonation, its grammatical system, its lexical sets (i.e., the functioning verbal contexts), as well as its whole range of social and cultural meanings.[14]

(B) This approach to language teaching uses the "oral approach" primarily in the *first stage* of language learning and does *not reject* reading and writing *in any stage* of language learning. This "oral approach" is *not* the same thing as the "direct method," and must not be confused with the limitations of the "direct method." The name "oral approach" is primarily a name to describe the *end to be attained in the first stage* of language learning rather than a descriptive limitation of the permissible devices to attain that end. *In the first stage* of learning a new language, the end is that the *basic* structural patterns, with a limited vocabulary, are to be learned so well that they can be *produced orally,* automatically, and without hesitation, when the learner is confronted with the appropriate situation. To the accomplishment of this end, not only oral practice is used but also every other means of learning, including writing and reading. *After the first stage* of language learning in accord with this approach the teacher or the student may devote himself entirely to reading and writing.[15]

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[14] See C. C. Fries, *Teaching and Learning English as a Foreign Language* (1945), especially Chapter V, pp. 57-61.

[15] See C. C. Fries, *Teaching and Learning English as a Foreign Language* (1945), pp. 5-9.

(C) This approach to language teaching *is not* just a new set of classroom procedures or devices for teaching—it is *not primarily a new method as such.* It *is not* confined to mechanical matters and limited to narrow utilitarian purposes. The fundamental feature of the "new approach" to language teaching *is not* a greater allotment of time, *is not* smaller classes, *is not* even a greater emphasis on oral practice. The fundamental feature of this new approach to language teaching is a new basis upon which to build the teaching materials. This new approach to the selection and ordering of the materials for teaching rests upon

    (a) a scientific descriptive analysis of the language to be learned, e.g., English;

    (b) a similar scientific descriptive analysis of the language of the learner, e.g., German;

    (c) a systematic comparison of these two descriptive analyses in order to bring out completely the differences of structural patterning of the two language systems.

But these descriptions and this systematic comparison of the native language of the student with that of the language to be learned *is not the material to be taught.* It constitutes rather the basic matter upon which to build satisfactory classroom exercises which will contain the significant contrasts that must be mastered as new molds or patterns for the new language material. We assume that our first step is to learn to *use* the new language rather than to acquire *detailed information* about that language. The structural analyses and the systematic comparison indicated above are matters not for the ordinary student but for the makers of the textbooks and for the training of the teachers. Good teachers of a foreign language have often, from their experience, hit upon many of the special difficulties of their students. But such good results from practical teaching experience alone are unsystematic and uneven because they are not related to any principle which would provide a thorough and consistent check of the complete language material itself and reveal the essential nature of the difficulties. Learning a foreign language is always a matter of acquiring a *new set* of language habits against a background of an *older set* of language habits. The problems of the Spanish speaker in learning English differ

from those of the Portuguese speaker; and those of the German speaker differ from those of both the Spanish and the Portuguese. The procedures of a sound structural analysis can provide for the teacher a whole range of new insights into the nature and content of the precise problems with which his pupils must struggle.

2. This new approach to the analysis of the linguistic material itself, based upon a new view of the nature of the functioning signals of a language, does furnish the basis also for some principles of method.

(A) Accuracy comes first, *not* the learning of an extensive vocabulary. The accuracy to be achieved here, is first, the mastery of the sound system--to hear and to produce the distinctive sound contrasts in the stream of speech. It is, second, the mastery of the features of arrangement (forms, intonation, position) that constitute the signals of structural meanings. These are the matters that the native speaker as a very young child has acquired as unconscious habits, so early that, like learning to walk, he cannot remember the learning process. These matters must become automatic habits for the learner of a new language. Of course they cannot be learned in a vacuum. There must be sufficient vocabulary to operate the structures and represent the sound system in actual use, but the learner is not ready to devote his chief attention to expanding his vocabulary until accuracy of the patterns of contrast of sound segments, of intonation, of forms, of position, within a limited range of expression, has become largely automatic habit.

(B) All apsects of the teaching must proceed by *contrasts of items in structure* not by isolated items as items. Practice with significant sound features for example, must always deal with these features in contrastive sequences, first in pairs or groups of words with minimum contrasts (bed - bad; luck - lock - look; insight - inside) ; then with such words in contrastive sentences (It was only a little red—It was only a little raid); and finally with such contrasts in paragraphs representative of the stream of speech.

(C) The pattern practice to make automatic the control of the significant contrasts of the various sets of signals a language uses must not be simply repetitive drill. Imitation and

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repetition is of course the first step. The next step involves productive conscious choice among several patterns—with the selection of the pattern as the point of attention. The third step aims at an automatic, spontaneous selection of a pattern with the attention centered *not on the structural patterns themselves but* on changing situations and shifted meanings, introduced by a variety of differing vocabulary items.

It is the practical use of the linguistic scientist's techniques of language analysis and description in the choice and sequence of materials and the principles of method that grow out of these materials that lies at the heart of the "new approach to language learning."

3. This new view of the nature of the functioning signals of a language provides the basis for a new approach to the building of tests and measures of progress and achievement in the mastery of a new language.

(A) With the descriptive analyses available of both the language to be learned and the language of the learner [see II, (C), (a), (b), (c), above] it is possible in tests to avoid the great range of insignificant language items, and to center attention upon the comparatively few that can be proved to be of strategic importance. Thus, brief and easily administered tests can now be constructed which can measure the progress and achievement of both beginning and advanced students with a high degree of validity.

(B) In outward form, the tests based upon such scientific descriptive analyses may appear to confine themselves to the simple mechanical details and not to differ from the many so-called "objective" tests formerly published. The fundamental difference of the tests based upon this new approach to language *cannot* be detected by an inspection or examination of the content by· those who are not trained in scientific descriptive analysis and who are not familiar with the results of such analysis as applied to both the languages involved.

(C) Tests of this kind can be so constructed that the ordinary class-room teacher can administer them and can interpret their results in terms of norms or standards that have been established for each particular test. Such tests, however, *can not* be constructed by the ordinary teacher for himself. They cannot be constructed by one who is an expert in

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test construction *only*. They must be the work of such an expert who has at hand the descriptive materials of the languages involved and is himself trained to understand their significance.[16]

III. Structural Linguistics and
The Culture of a People

1. If, as indicated above [II, 1, (A),]; the fundamental purpose or objective of foreign language teaching is to achieve an understanding, as complete as possible, between people of different linguistic backgrounds, then to deal with the culture and life of a people is *not just an adjunct* of a practical language course, something alien and apart from its main purpose, to be added or not as time and convenience may allow, but an *essential feature of every stage of language learning*.

(A) To achieve this end, we of the English Language Institute [17] have first of all agreed to accept a particular attitude and point of view that is not always the attitude and view of all groups in our communities. Four differing groups can be roughly identified in nearly all communities.

(a) There are those people who are ultra-nationalistic. They don't like "foreigners" or things "foreign." They feel that what they have in their own community is better than anything in another community that differs from theirs. Abroad, they constantly point out the differences between what they find and what they have at home—always to the disparagement of things abroad. The ultra-nationalistic group find it very difficult to "understand" a foreign culture.

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[16] See articles by Prof. Robert Lado in "Selected Articles from *Language Learning*" (1953), pp. 169-211.

"Linguistic Science and Language Tests," pp. 169-176.

"Survey of Tests in English as a Foreign Language," pp. 177-192.

"Testing Control of the Structure of a Foreign Language," pp. 193-211.

[17] At the English Language Institute of the University of Michigan we have been struggling for more than 15 years with the problems involved in this approach to the understanding of the culture and life of various peoples.

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(b) There are those people who hold just the opposite view--the "sentimental tourists." They feel that anything that comes from abroad is better than what they have at home. As they travel they seek the very "strange" customs and dress, and collect picturesque and spectacular items. The "sentimental tourists" practically never even attempt to grasp the "patterns" of living in a foreign culture.

(c) There are those who are intellectually curious. They collect all sorts of information about a people and may know a great deal *about* the history, the political system, the economics even the literature, the art, the music of that people. But for them, all this information remains as mere knowledge and is never built into real *understanding* of the people. We believe that understanding must rest on information but that *information by itself is not understanding.*

(d) There are those who struggle to achieve real understanding and sympathetic insight into the way a foreign people regard the various activities of their own life and ways. They try to build up a vivid imaginative realization of what the history, the social practices, the songs, the physical features of the land really mean to the foreign people themselves. It is this point of view that we have adopted in our approach to the culture of a people and have assumed that progress toward the achieving of this kind of sympathetic understanding is the ultimate *measure of the success of each stage of language teaching.*

(B) From this point of view the words, the linguistic forms of a language, never "mean" the words, the linguistic forms of another language, they "mean" the specific, concrete, experience of the native users of that language. Translation, therefore, on the very elementary level, which seeks word for word equivalents without attention to the very differing content of the specific experience and attitudes covered by these words and linguistic forms for the users of each of the two languages involved, very often leads away from the kind of sympathetic understanding which is our fundamental purpose in all language teaching.

2. The *content* of the cultural materials to be dealt with presents many problems.

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(A) Most of the cultural materials usually discussed in relation to language teaching concern features of the "overt" or external culture of a people—the history (often rather strictly political history), the geography, the educational system, the religious groups, the social classes, the music, the art, the literature.[18] The selection of the specific matters to be included in each of such topics is seldom based upon any consistent and fundamental principle. Seldom is it recognized that even in matters of this level the same acts of overt behavior will very probably have very different cultural or structural values in two different societies.[19] The search, therefore, must always aim at discovering the *structural patterns* of the overt culture if one is to make any progress toward understanding the specific practices of a people. Here too, those who grow up in a different culture have a whole range of "blind spots" which only the processes of a sound structural technique of analysis can help to overcome. The following quotation from Edward Sapir[20] states the matter precisely.

"It is impossible to say what an individual is doing unless we have tacitly accepted the essentially arbitrary modes of interpretation that social tradition is constantly suggesting to us from the very moment of our birth. Let anyone who doubts this try the experiment of making a painstaking report of the actions of a group of natives engaged in some activity, say religious, to which he has *not* the cultural key. If he is a skilful writer, he may succeed in giving a picturesque account of what he sees and hears or thinks he sees and hears, but the chances of his being able to give a relation of what happens, in terms that would be intelligible and acceptable to the natives themselves, are practically nil. He will be

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[18] In the past, the literature of belles-lettres was often the sole material included.

[19] The situation on this level is quite similar to that for the different structural values of the physically same phonetic features of a language. (See above I, 2).

[20] Quoted from *Selected Writings of Edward Sapir on Language, Culture, and Personality*, ed. by D.G. Mandelbaum, pp. 546-547.

guilty of all manner of distortion; his emphasis will be constantly askew. He will find interesting what the natives take for granted as a casual kind of behavior worthy of no particular comment, and he will utterly fail to observe the crucial turning points in the course of the action that give formal significance to the whole in the minds of those who do possess the key to its understanding."

(B) In finding and selecting the cultural materials of those matters that are *not of the overt or external kind* the problems increase in number and in difficulty. These are matters that are significant in that differing practices often cause friction but are taken for granted by the natives themselves to such an extent that they are not aware that they exist.

In some countries, for example, it is the practice to "shake hands" in connection with greetings and leave-takings even of the most informal kind. In other countries this "shaking hands" occurs only upon more formal occasions. Unconsciously, then, those who are accustomed to shake hands upon all such occasions will interpret the neglect of this social act by those for whom it is not the custom as unfriendliness or crudity.

In some national cultures the call for silence in a group when a speaker is about to begin uses the voiceless spirant "s" sound. In the United States the use of this sound when a speaker is about to begin is a gross insult. For English speakers in the United States the call for silence uses the voiceless spirant "sh" sound, $\left[\int \right]$. Those who, in the call for silence, use the " s" sound (which in the United States is called a "hiss") sometimes grossly insult an American speaker when they are really trying to help him.

Americans, Britons, and Germans, as they eat, each use their forks according to a different pattern. Sometimes Americans or Britons, or Germans will react to this behaviour pattern of the others as something crude or even offensive. Cutting potatoes with a knife as part of the process of eating has a social significance for some German groups that it does not have for many other linguistic groups of western European culture.

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Differing cultural patterns of this kind seem trivial as one gives a few examples but the actual number of such characteristic differences between two peoples is tremendous and they usually cause friction and hostility in proportion to the degree to which they are not recognized and not known.

The principles and techniques of the structural approach can here also help to avoid many of the worst pitfalls in the selection of the content of the cultural material that must become a fundamental part of any really satisfactory language course.

(C) The effective *use* in teaching, of even the best selected cultural materials presents exceedingly difficult problems. After the range of important cultural patterns has been established and the content of these materials defined it is no simple matter so to deal with them in the various stages of language learning that those of a differing cultural background can achieve a sympathetic insight into the new way of evaluating experience. In some way the life experience, the modes of behavior, the bundles of history, the evaluations of "proper" and "improper," of right and wrong, which have been the undifferentiated and unconscious background of all the "talk" of the people who have used the foreign language all their lives must be vividly realized imaginatively by learners who have had a very different life experience. In some way the learner of a foreign language must "start as a child and grow up again" in a different way of grasping experience. The problem lies in finding the way to achieve imaginatively what cannot be accomplished physically. We have hitherto expected to achieve such a basis of understanding through information, through literature, and through the cinema. But we now realize more clearly that such information is always evaluated through the patterns of culture of the learner; the literary experience created arises out of and is formed by the elements that have become the imaginative repertoire of the learner; the foreign movies are seen and reacted to not in terms of the people for whom they were made, but in terms of a people who cannot realize all that is taken for granted by the producers to give their production the dramatic surface necessary for grasping the portrayed life situations in satisfactory proportion. Boys in

secondary schools in Germany cannot, by simply reading the adventure books written for secondary school boys in the United States, achieve any understanding of the imaginative experience these books build up for such boys in the States. All cultural materials of a foreign language must in some way be *attached to or built into the particular cultural experience of the readers,* if they are to serve the purposes of understanding.

We have thus been struggling to develop not only our techniques of analysis to establish and define the functioning patterns of behavior of a foreign people and to gather the materials through which these patterns are clearly realized, but also our techniques for making a systematic comparison of the functioning patterns of two cultures and to break through the barriers that prevent the sympathetic vivid imaginative realization of understanding.

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PATTERNS OF DIFFICULTY IN VOCABULARY

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1. *Words.*

1.1 Undue emphasis on words as words to the neglect of pronunciation and grammatical structure is not in keeping with modern linguistic thinking. Sapir says bluntly in talking about linguistic study, "The linguistic student should never make the mistake of identifying a language with its dictionary."[1] On the other hand, one cannot deny or ignore the existence of the word as a tangible unit of language. Sapir again, with characteristic insight, puts it thus:

> No more convincing test could be desired than this, that the naïve Indian, quite unaccustomed to the concept of the written word, has nevertheless no serious difficulty in dictating a text to a linguistic student word by word; he tends, of course, to run his words together as in actual speech, but if he is called to a halt and is made to understand what is desired, he can readily isolate the words as such, repeating them as units. He regularly refuses, on the other hand, to isolate the radical or grammatical element, on the ground that it "makes no sense."[2]

1.2 The word has been defined for scientific linguistic study by Bloomfield:

> A free form which consists entirely of two or more lesser free forms, as, for instance, *poor John* or *John ran away* or *yes, sir,* is a *phrase*. A free form which is not a phrase, is a *word*. A word, then, is a free form which does not consist entirely of (two or more) lesser free forms; in brief, a word is a *minimum free form*.[3]

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[1] Edward Sapir, *Language* , (New York, 1921), p. 234.

[2] *Ibid*, pp. 34-35.

[3] Leonard Bloomfield, *Language* , (New York, 1933), pp. 177-178.   For a more complete discussion of the word see also pp. 178-183 and 207-

1.3 A clear insight into the way words are used by the speakers of a language is given by Fries. He says,

> For us, a *word* is a combination of sounds acting as a stimulus to bring into attention the experience to which it has become attached by use.... [4]
>
> More than that, while the experience that is stimulated by the sound combination is a whole with a variety of contacts, usually only one aspect of this experience is dominant in attention—a particular aspect determined by the whole context of the linguistic situation. When one uses *head* in such a context as "a *head* of cabbage," it is the shape which is the dominant aspect of the experience that has made a connection with the material unit, a cabbage. When one uses head in such a context as "the *head* of a department," it is the head as the chief or dominating part of the body. When it is used in "the head of the river," another aspect of the relation of head to the body is important in attention. From a practical point of view, the various separate dictionary meanings of a word are the particular aspects of the experience stimulated by a word that have been dominant in the attention of users of the word as these aspects may be inferred from the context of a large number of quotations in which the word appears. For the native user of a language, the symbol, with the wide range of experience it stimulates, is so much a part of the very texture of his thought that he exercises great freedom in turning upon any aspect of this experience in line with the pressing needs of his thinking. The "meanings" of words are, therefore, more fluid than we realize. For the foreign speaker of a language who learns this new language as an

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246. For a mechanical procedure that shows word and morpheme boundaries see the recent article by Zellig S. Harris, "From Phoneme to Morpheme," *Language*, XXXI (1955), pp. 190-222.

[4] Charles C. Fries, with the cooperation of A. Aileen Traver, *English Word Lists, A Study of Their Adaptability for Instruction,* Washington, D.C., American Council on Education. Reprinted Ann Arbor, 1940, p. 87.

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adult, the words as stimuli probably never function with anything like the same fullness and freedom as they do for a native.[5]

1.4 Three aspects of words concern us here: (1) their form, (2) their meaning, and (3) their distribution.

1.41 Form. In most languages the form of words consists of sound segments, stress, and, in tone languages such as Chinese and Thai, pitch. The form of the Spanish word *jugo* 'juice' is made up of four significant sound segments (phonemes) /xúgo/ and stress—primary stress on the first syllable. If we change one of the sound segments, *j*, to y, a new word results, *yugo* 'yoke.' If we change the position of the primary stress, a new word results, *jugó* 'he played.' The Thai word ม้า [ma:?] 'horse' is made up of certain sound segments and a high, level pitch. The same segments with a rising pitch would mean 'dog.'

The form of words varies according to the formality of the situation, speed of talk, position in the sentence, position as to stress, etc. For example, the English word *and* varies from three segmental phonemes /ænd/ through intermediate degrees of reduction, /ənd/, /æn/, /ən/, to one segmental phoneme, /n/. The word *not* occurs as /nat/ and /nt/; *will* as /wɪl/ and as /l/; *is* as /ɪz/ and /s/ or /z/. Naïve speakers of a language find it difficult to believe that the words they use vary so much in form.

Another relevant feature of form is that of the parts of words. English *observational* is made up of a stem *observ-* (compare *observe*),[6] a suffix -(*a*)*tion*, and another suffix -*al* . Other languages, on the other hand permit more complex combinations than those of English. As something of a linguistic curiosity, but definitely a form of the language, Sapir mentions the example from Paiute, *wii-to-kuchum-punku rügani-yugwi-va-ntü-m (ü)*, meaning 'they who are going to sit and cut up with a knife a black cow (or bull)'[7]

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[5] *Ibid*, p. 88.

[6] It is doubtful that native speakers break this form further into *ob* + *serve* .

[7] Edward Sapir, *Language*, p. 31.

The frequency of the parts of words may counteract the lack of frequency of the total word. If we use the word *observational*, it will probably be understood by elementary students of English as a foreign language even though it appears among the 1,358 least frequent words in Thorndike's list. [8] The parts *observe* + (*a*)*tion* + *al* are much more frequent than the word itself. The word *observe* is listed by Thorndike among the 2,000 most frequent words in English. The suffix -tion is used in so many words in English that its total frequency must be very high. I found examples of -*tion* in every page of a random ten page sample of Bloomfield's *Language* and in a similar spot-check of ten random pages of the lighter style of *The Art of Plain Talk* by Rudolf Flesch. The suffix -*al* is less frequent than -*tion*, but it is still frequent enough to occur on practically every page of text.

English has lexical forms made up of patterns of separate words, for example *call up* 'to phone.' Many languages do not permit such units or do not permit the same types of formal patterns. Compare for example Spanish *telefonear* 'to telephone' or *llamar por teléfono* 'call by telephone' but nothing like the construction *call up*.

1.42 Meaning. It is quite an illusion to think as even literate people sometimes do that meanings are the same in all languages, that languages differ only in the forms used for those meanings. As a matter of fact the meanings into which we classify our experience are culturally determined or modified and they vary considerably from culture to culture. Some meanings found in one culture may not exist in another. The meaning, 'horse' did not exist in American Indian languages until the Spanish conquest and colonization brought horses to America. Similarly, the meanings 'corn' (in the sense of maize) and 'potatoes' did not exist in Europe until the same people took those products from America to Europe in their ships. But even when the reality is available to the culture, the meanings will differ, or not exist in some cases. The Eskimos have many meaning distinctions corre-

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[8]Edward L. Thorndike and Irving Lorge, *The Teachers' Word Book of 30,000 Words,*(New York 1944).

[9]Rudolf Flesch, *The Art of Plain Talk,* (New York, 1946).

lating with different types of snow and use separate words to express those distinctions, whereas other cultures that have considerable experience with snow simply do not have as many meaning distinctions. These meaning differences are seldom as forcefully noticeable as when one attempts to translate accurately a text from one language to another.

Meanings can be classified according to the forms they attach to. Meanings that attach to words as words are lexical meanings, for example the meaning, 'a building for human habitation,' that attaches to the form *house* is a lexical meaning in English. The meaning 'two or more; plural' that attaches to the bound form - *s* [s] in *books, cats, maps*, can be called a morphological meaning, while the same meaning 'plural' that attaches to the word form *plural* is a lexical meaning. The meaning 'question' attached to the word arrangement in the sentence, *Is he a farmer*, is a syntactic meaning, but the meaning 'question' attached to the word form *question* is a lexical one.

At the moment, we are primarily concerned with lexical meanings, but different languages classify their meanings differently, that is, what is habitually a lexical meaning in one language may be a morphological meaning in another. Speakers of one language who have not come in meaningful contact with other languages assume not only that the meanings are the same but that they will be classified the same way. Speakers of English find it difficult to imagine a language in which the singular-plural distinction in *book:books* is not made morphologically. "How else can you communicate that idea?" they are apt to ask. In Chinese, for example, that distinction is not made, that is, it is not made morphologically, by a bound form such as - *s* in English. In Chinese, the meanings 'two' 'three' 'more than one' etc. are lexical meanings; those meanings attach to words. When the meaning is relevant to the message, the words are included, and when the meaning is not relevant, the words are left out. Greek had the meanings 'singular' 'dual' and 'plural' as morphological meanings. We can assume that Greek speakers wondered how languages that have only singular and plural could express the meaning 'dual; two.' That distinction is a lexical one in English.

The matter of the frequency of the various meanings of a word is relevant to us. If one uses the word *get*, which appears among the 500 most frequent ones in Thorndike's list, in the context, *We did not want to overdo the thing and get six months,* meaning 'suffer imprisonment by way of punishment,' we would find that some fairly advanced students of English as a foreign language would not 'know' the word. Yet we could not convincingly assume that they did not really know one of the 500 most frequent words in English. That particular meaning of *get* is so infrequent that it was not reported as having occurred at all in a sample of over half a million running words.[10] The *Oxford English Dictionary* lists 234 meanings for the word *get* and obviously one can know a good many of those meanings and still miss the word in the particular context used as an example above.

The meanings discussed are usually part of the intended message in communication. These meanings are more or less consciously intended by the speaker and may be called primary meanings. In actual use, however, other meanings are conveyed by words, for example, if a word is restricted in use to a given social class, its use by a speaker may give the listener the meaning of social class identification. Similarly if a word is restricted to a geographical area, its use by a speaker will convey a locality meaning, also.

1.43 The distribution of words is important to us because at any given moment in the history of a language the speakers of that language carry with them the habits of the restrictions in distribution and because different languages have different restrictions. There are grammatical restrictions so that in English, *water* may be a noun as *in a glass of water,* a verb as in *water the garden,* a noun adjunct as in *water meter,* but not an adjective without some change in form, e.g. *watery substance.* In other languages the restrictions may be greater; for example in Spanish, *agua* 'water' as a word may only be a noun unless its form is changed.

The fact that words may show different geographic distribution, falling in or out of this or that dialect area of a

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[10] Estimated from data supplied in Irving Lorge.

language is important. And, as already indicated, distribution in the various social class levels also has to be considered because of the secondary meanings such distribution conveys. Statements of raw frequency alone leave these matters unresolved. Thorndike's list gives *ain't* among the 2,000 most frequent words in English, but the list does not say if *ain't* is typical of Standard English or of the speech representing certain other dialects.

Words are not only restricted geographically and socially; they are often restricted as to styles of speaking and writing. For example, many words found in poetry will not be found in ordinary conversation or in ordinary prose; and vice versa, some words used in prose will not be found in poetry.

1.5 Classifications. It should be abundatly clear from the above brief discussion if not previously so that the words of a language are more than merely a list of lexical items. The words of a language are a highly complex system of classes of items—interlocking classes as to meaning, form, grammatical function, distribution, etc.

1.51 Fries[11] classifies English words into four groups that seem relevant to us. They are (1) function words, (2) substitute words, (3) grammatically distributed words, and (4) content words. The function words primarily perform grammatical functions, for example, *do* signalling questions. The substitute words, *he, she, they, so,* etc. replace a class of words and several sub-classes. Grammatically distributed words, *some, any,* etc. show unusual grammatical restrictions in distribution. The number of words in the first three groups is rather small, say 200 in round numbers in English.[12] The fourth group, content words, constitutes the bulk of the vocabulary of the language. In English and in many other languages the content words are subdivided into items treated as things, as processes, as qualities, etc.

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[11] Charles C. Fries, *Teaching and Learning English as a Foreign Language,* (Ann Arbor, 1945), pp. 44-50.

[12] Estimated from data supplied in Fries, *The Structure of English,* (New York, 1954), Ch. VI.

1.52 Two further distinctions in vocabulary are required to complete our model. We need to distinguish between a common core vocabulary known to all the members of a language community, and specialized vocabularies, known only to special groups. We are of course primarily interested in the common core vocabulary, because specialized vocabularies have to be learned by native as well as non-native speakers. We are interested primarily in the special problems of the latter.

1.53 The other distinction is that between vocabulary for production and vocabulary for recognition. As a rule our recognition vocabulary is much larger than our production vocabulary. Various estimates have been made of the minimum necessary vocabulary for a student to be able to communicate in ordinary situations. Basic English uses approximately 1,000 words for that purpose.[13] Michael West considers a vocabulary of 2,000 words "good enough for anything, and more than enough for most things."[14] Obviously these are minimum production vocabularies. For recognition, larger minimum vocabularies are necessary.

2. *The Native Language Factor.*

2.1 Ease and difficulty. Given the above model and making use of available vocabulary studies one might attempt to select a sample vocabulary for teaching or for testing. Such attempts have been made and have received wide circulation. C. K. Ogden's Basic English list and West's *A General Service List of English Words* [15] are well known examples in an active field. Nevertheless, in spite of the care and experience that has gone into the preparation of such lists, they cannot give us a vocabulary sample graded as to difficulty because by their very nature they fail to take

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[13] C. K. Ogden, *The System of Basic English,* (New York, 1934).

[14] Michael West, "Simplified and Abridged," *English Language Teaching,* V, No. 2, p. 48.

[15] Michael West, *A General Service List of English Words with Semantic Frequencies and a Supplementary Word-List for the Writing of Popular Science and Technology.* (New York, 1953).

into account the most powerful factor in acquiring the vocabulary of a foreign language, namely, the vocabulary of the native language.

If in a test of English vocabulary for Spanish speakers one uses the words *machete, suppuration*, and *calumniator* which appear among the 1,358 least frequent words in Thorndike's 30,000 word list, one would find that practically all the students knew them. Could we then assume that those students possessed a vocabulary of over 28,642 words in English? Obviously not. Spanish has the words *machete, supuración* and *calumniador*, similar in form and meaning to the English words, and Spanish-speaking students will know those words by the mere fact of knowing Spanish. We simply cannot ignore the native language of the student as a factor of primary importance in vocabulary, just as we cannot ignore it in pronunciation and grammatical structure.

Another example arguing for the importance of the native language has to do with grammatical distribution of two very simple words. The words *fire* and *man* will probably be more difficult for Spanish speakers in the contexts, *Fire the furnace*, and *Man the guns*, than in *Open fire* 'start shooting' and *A man broke his leg* . The difference is more subtle than in the previous example, but it is there nevertheless. Spanish has a noun, *fuego*, 'fire' used in *Abran fuego*, 'Open fire' but not used as a verb as in *Fire the furnace*. Similarly, a Spanish noun, *hombre*, 'man,' is used in *Un hombre se rompió una pierna*, 'A man broke his leg,' but is not used as a verb as in *Man the guns*. There are other elements involved in these examples to be sure, but grammatical distribution is definitely a factor.

2.2 Difficulty patterns. Similarity and difference to the native language in form, meaning and distribution will result in ease or difficulty in acquiring the vocabulary of a foreign language. Comparing the foreign language vocabulary with that of the native language we will find words that are (1) similar in form and in meaning, (2) similar in form but different in meaning, (3) similar in meaning but different in form, (4) different in form and in meaning, (5) different in their type of construction, (6) similar in primary meaning but different in

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connotation, and (7) similar in meaning but with restrictions in geographical distribution.

Since some of these groups overlap, with the result that some words will fall into more than one group at the same time, the difficulty will vary somewhat. Nevertheless, we can predict general level of difficulty on the basis of these groupings, and will classify each group into one of three levels of difficulty: (1) easy, (2) normal, and (3) difficult.

The term *similar* is restricted here to items that would function as "same" in the other language in ordinary use. We know that complete sameness is not to be expected in language behavior. The actual behavioral boundaries of similarity depend on the items that persons of one language "identify" or "translate" as same from and into the other language. References to form are to the sounds of the words, not to the spelling, even though spelling is used to represent the words in this paper.

Pattern 1, *Cognates*: 16 words that are similar in form and in meaning. English and Spanish have thousands of words that are reasonably similar in form and in meaning, for example *hotel, hospital, calendar.* 17 Some of these were kept in Spanish as it evolved from Latin and were borrowed into English from Latin or French. Some go back to earlier forms presumably found in Indo-European, the common ancestor of English and Spanish in what is known as the Indo-European family of languages. Whatever the cause of the similarity, these words usually constitute the lowest difficulty

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16 Cognates here mean words that are similar in form and meaning regardless of origin. The usual meaning of cognate is "related in origin." For us even if two words are not related in origin they will be called cognates if they are similar in form and meaning. Similarly, if two words have the same origin but are now so different that speakers do not identify them as similar, they will not be considered cognates for our purpose.

17 For a list of Spanish-English cognates see Marshall E. Nunn, and Herbert A. Van Scroy, *Glossary of Related Spanish-English Words*, University of Alabama Studies, Number 5.

group—they are *easy.* In fact, if they are similar enough, even students who have never studied English at all will recognize them. These words are of value at the very elementary level.

Even though there are thousands of words that are similar in English and Spanish these similarities can be classified into a relatively small number of sub-patterns, for example, English *-tion* is similar to Spanish *-cion,* and hundreds of words can be classified as similar under that sub-pattern. [18] When using such words in teaching and testing beginning students we will do well to sample them as sub-patterns rather than as independent items.

Vigorous discussion often results when cognate words are mentioned in connection with teaching. We do not need to get involved in such discussions since cognates are presented here for recognition rather than for production. There can be little quarrel with having the student recognize them when they are used by others.

It is sometimes falsely assumed that cognates are to be found only between two related languages such as English and Spanish, not between unrelated languages such as English and Japanese, Chinese and English. In actual fact, numerous cognates can be found between English and Japanese and between English and Chinese, and many other languages which are quite unrelated to each other. There are many words which have circled the globe, and many more that have extended far beyond the boundaries of any one language or any one culture.

Pattern 2, *Deceptive Cognates:* [19] Words that are similar in form but represent meanings that are different. Words

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[18] For a brief account of nine patterns of Spanish-English cognates see *Lessons in Vocabulary,* from *An Intensive Course in English* by the Research Staff of the English Language Institute, Charles C. Fries, Director, (Ann Arbor, 1954). Compare also E. M. Anthony "The Teachings of Cognates", *Language Learning,* IV (1952-53), pp. 79-82.

[19] "Deceptive cognates" as used here refers only to similarity in form and difference in meaning; it does not refer to the origin of the words.

that are similar in form in two languages may be only partly similar in meaning, they may be altogether different in meaning but still represent meanings that exist in the native language, or they may be different in meaning and represent meanings that are not grasped as such in the native language. Japanese borrowed the word *milk* from English but restricted its meaning to 'canned milk.' The form of the word in Japanese is similar to English but the meaning is only partly similar since it does not include fresh milk, for example. Spanish has a word, *asistir*, which is similar in form to English *assist,* but the meaning is practically always different. Spanish *asistir* is similar in meaning to English *attend*, while English *assist* carries with it the feature of helping, of supporting. As a result of this difference in meaning, Spanish speakers learning English say they *assisted a class* when meaning they *attended* 'were present.' English *in the table* and *on the table* are similar in meaning to Spanish *en la mesa* in ordinary conversation. Only under very special circumstances will a Spanish speaker make a meaning distinction between *in* and *on* the table, and then it will not be only an *in:on* contrast but a *table* vs. *drawer* contrast as well. Spanish speakers will say *en el cajón* 'in the drawer' and *sobre la mesa* 'on the table.' The problem here is not simply attaching a familiar meaning to a new form but also grasping a new meaning distinction, a different way of classifying reality.

These words that are similar in form but different in meaning constitute a special group very high on a scale of difficulty. We will label them *difficult.* They are not adequately sampled on frequency criteria alone because their similarity in form to words in the native language raises their frequency in student usage above normal for the language. In other words, they are more important than their frequency rating might indicate. They are sure-fire traps.

In usual linguistic terminology deceptive cognates would refer to words in two languages that because of their form would seem to be related by origin but are not so related. For us such a case would be classed as a cognate provided the meanings are also similar.

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Pattern 3, *Different Forms*: Words that are similar in some of their frequent meanings but different in form. Difficulty level: normal. Example. English *tree* in the context, *The leaves of that tree are falling,* is similar in its primary meaning to Spanish *arbol* in a comparable context. The learning burden in this case is chiefly that of learning a new form, *tree*, for a meaning of *arbol* already habitually grasped by Spanish speaking students. This kind of vocabulary learning is naïvely taken by many to represent all vocabulary learning. Such an oversimplification fails to account for the various vocabulary groups which appear when we have looked closer and have considered the native language.

It is also important to note that although certain meanings of a word in one language are sometimes translatable into a word in another language there are very few if any words in two languages that are the same in all their meanings. It is difficult for example to realize that the words *tree* and *arbol* of our example are similar in only about four out of their twenty or more meanings and uses. Only the poorest two-language dictionaries will show numbers of words in a one-to-one meaning correspondence in the two languages. Only words such as *penicillin*, which are borrowed into many languages simultaneously, can be considered equivalent in all their meanings, and even then if such words gain any currency at all they soon develop new meanings that are not parallel in different languages.

It is in these content words that are different in form but similar in some meanings, however, that decisions can and should be made as to vocabulary size on the basis of frequency lists for recognition and adequacy for expression on a production level.

Pattern 4, *"Strange" Meanings*: Words that are different in form and represent meanings that are "strange" to speakers of a particular native language, that is, meanings that represent a different grasp of reality. Difficult. In American English, *first floor* is different in form from Spanish *primer piso* and different in its grasp of what constitutes 'first.' Spanish *primer* 'first' in this case does not mean number one at ground level but number one above ground level, and so

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primer piso refers to what in Am. English is called *second floor* and not *first floor,* which would be the literal translation.

These cases constitute special problems in the vocabulary of a foreign language. Obviously it is not enough merely to teach a new form; the strange meaning must be made familiar. Some of the instances covered by this pattern—the instance in which the form in the two languages is similar—fall also under pattern 2, *deceptive cognates.* Pattern 4, however, includes all those in which there is no particular similarity in the form of the words in the two languages.

There is every reason to believe that the same kind of distortion that we can observe in the sounds of the speech of a non-native speaker also occur in the meanings he is trying to convey. In both cases he is substituting sounds and meanings of his native language and culture. In the case of sounds the untrained person hears a vague "foreign" accent and the trained person hears specific distortions. In the case of meanings the distortions go largely undetected by the observer or listener because the native meanings stimulated in him by the speech forms may not be accompanied by outwardly observable behavior. It is only when a word form is used in an "unusual" way that our attention is drawn to possible meaning differences. Similarly, when the non-native speaker of a language listens to the language as sppken by natives, the meanings that he grasps are not those that the native speakers attempt to convey, but those of the system of the language of the listener.

Pattern 5, *New Form Types:* Words that are different in their morphological construction. Difficult. When the speakers of various Romance languages and of Japanese, Chinese and other languages learn English they have great trouble learning such lexical items as *call up* 'to telephone,' *call on* 'to visit,' and *run out of* to exhaust the supply of.' If in the native language of the student there are no lexical items made up of two otherwise separate words in patterns like the one illustrated, he will not easily grasp these 'two-word verbs" in the foreign language. The difficulty is increased when the elements can be separated by other words as in the example, *Did you call the boy up?* These two-word verbs constitute a difficulty group all its own for speakers of various languages.

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"Idioms"—expressions peculiar to a language—are identifiable as we compare two languages rather than within the language itself. An expression which may seem peculiar to native speakers may be quite natural to speakers of another language and would therefore not be an "idiom" to them. On the other hand, an expression which seems quite natural to native speakers may be strange to foreign speakers of a particular language background. If we should find on comparing the expression with a variety of languages that it is strange to all or nearly all of them, we would be justified in calling it an idiom in general, but even then the statement would be meaningless in those cases in which the other language had a parallel expression. As a matter of fact, the idiom counts made in the wake of the Modern Foreign Language Study were two-language studies. The *Spanish Idiom List* by Keniston[20] lists expressions in Spanish that are strange to English speakers. In all of the counts the compilers looked at expressions in the foreign language with English as their frame of reference.

Pattern 6, *Different Connotation*: Words that have widely different connotations in two languages. Difficult. A special difficulty group is represented by words that are harmless in connotation in the native language but offensive or taboo in the foreign language, or vice versa. When they are harmless in the native language the student will use them in the foreign language without realizing their effect. When they are harmless in the foreign language the student will avoid using them for fear of setting off the same reactions they produce in his native language. In either case they are important on the level of social acceptability of words. A few examples will show how important these connotation differences can be.

In Spanish the expression *Dios mío* meaning literally 'My God' is often used as an appeal to the Almighty in matter-of-fact conversation. Even those Spanish speakers who have progressed considerably in their control of English will sometimes use the expression with the same feeling and intent in

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[20] Hayward Keniston, *Spanish Idiom List Selected on the Basis of Range and Frequency of Occurrence.* Publications of the American and Canadian Committees on Modern Languages. XI (New York, 1929).

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English, but the effect on English listeners is of course different. The name *Jesús* is often used as a given name in Spanish. Parents who thus name their children may actually feel they are honoring Christ, or at least do not feel any lack of respect. In English, however, people find it difficult to call a person by that name. It seems to smack of irreverence to English speakers to use the name for a human being, a radically different connotation from that in Spanish. In whistling at sports events or political rallies the difference is in the opposite direction: Spanish speakers may be shocked to hear a speaker whistled at and applauded at the same time. They believe the whistles indicate disapproval and they wonder why disapproval is expressed so openly as it appears to them. In Spanish the applause indicates approval, and whistling, a vulgar form of disapproval. Some youthful students of foreign languages delight in learning certain unprintable expressions not approved in polite company. When they ask for translations they get colorless renderings which when uttered leave us wondering why they are uttered at all.

These differences in connotation sometimes develop between dialects of the same language. In Cuba the familiar form of the second person pronoun, *tú*, is more widely used than in Mexico for example. A Cuban young man was rebuked by two Mexican young ladies because he used the familiar *tú*, which sounded a bit too bold to them. No amount of explaining was enough to completely convince the girls that the young man actually meant no disrespect. The word *grueso* 'fat' is used as a compliment at least in some dialects of present day Spanish. On a visit to Spain I was greeted repeatedly with "flattering" expressions of how "fat" I was. Being aware of the favorable connotation I appreciated the remark, but many an American young girl may not have felt flattered.

These have been obvious, even coarse examples of wide differences in connotation. More subtle differences exist and remain in the speech of speakers of foreign languages through the advanced stages of control of the language. We cannot do much to teach or to test these subtle differences specifically and completely, but it is possible to sample the more frequent and obvious cases of wide discrepancy in connotation.

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Pattern 7, *Geographically Restricted*: Words that are restricted as to the geographic areas in which they are used in the foreign language. Difficult, because the restrictions must be learned also. Restrictions in geographic distribution of words are important to the selection of words for teaching and for testing. Unless we are interested in teaching or testing a particular geographic dialect of a language we will choose forms that are part of the standard language if there is one, and words that are common to the major dialects if there is not a standard language. If we are interested in English without regard to whether it is Standard British or Standard American English we would avoid such words as *petrol* and *gasoline* in testing because they are typical of British and American usage respectively. If on the other hand we are interested in Standard American English as distinct from British English, we would use *gasoline*. Within American English, if we are not interested in any one dialect, we would use *dragon fly* for the insect known by that name, because that term is more general than Northern *darning needle* and Midland *snake feeder* for the same insect.[21]

Although part of what has been said about pattern 7 seems not to apply directly to the definition of a pattern of difficulty, it is an important consideration. The matter of geographic distribution fits more neatly into a difficulty pattern when we consider that a student who has learned a geographically restricted form must learn another for the same meaning if he is to communicate with speakers from geographic areas where the form he learned has no currency. Hence, the label "difficult" we have given the pattern.

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There has been on the whole much superficial oversimplified thinking about the vocabulary of languages, and a great deal of vocabulary research such as word frequency lists and simplified vocabularies suffers from that oversimplification. In dealing with vocabularly we should take into account three important aspects of words--their form, their meaning, their distribution--, and we should consider the various kinds or

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[21] Hans Kurath, *A Word Geography of the Eastern United States*. (Ann Arbor, 1949), p. 14.

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classes of words in the operation of the language. If these
things are important in understanding the vocabulary system
of a language, they become even more important when one
learns the vocabulary of a foreign language since the forms,
meanings, distribution, and classifications of words are dif-
ferent in different languages. Out of these differences arise
vocabulary problems and difficulty levels that constitute teach-
ing and learning problems and are telltale matters for vocabu-
lary tests. The patterns of difficulty described above are an
attempt to clarify and classify the problems involved.

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MEANING DETERMINATIONS:
OBJECTIVES AND PROCEDURES

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Wherever possible, we describe and differentiate the use and meaning of a linguistic form exclusively on the basis of formal, i.e., audible (or visible), features surrounding this form. This procedure is characteristic of the new philosophy of language description which is at the basis of applied linguistics.

The surrounding formal features (sounds or sound sequences, intonation modulations, perceptible interruptions preceding or following the form to be identified, etc.) constitute the determinant environment, or simply the *determinant,* of this form, even as we may speak of the process of describing or differentiating the form in the sense outlined above as its *positional determination.*

Positional determination applies to the most diverse fields of language study. Based upon this type of determination, we may, for instance, iron out difficulties in pronunciation. Do we have to feel "ill" every time we listen to the beginner pronouncing French *il* as if it were the English word describing his (and our) agony—because "he just cannot rid himself so soon of his native speech habits"? Not if we can show the pronunciation of the English phoneme /l/ to vary according as it is, or is not, uttered in certain initial positions (as in *land* or *Al,* respectively); initially in English it is articulated just about the way we should like to have it anywhere in French. Similarly, the use of the French sounds $[\phi]$ and $[\oe]$ is positionally determined: $[\phi]$ occurs, for example, in certain final positions where $[\oe]$ is never articulated; conversely, $[\oe]$ occurs before certain consonant sequences (that is, in so-called checked syllables) where $[\phi]$ is never found. Sound features also provide the basis for a positional determination of grammatical constructions. Thus, a sentence, in English, may be

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determined by characteristic arrangements of certain form-class members, as well as co-occurring intonation patterns.[1]

In much the same way, we can work out a positional determination of the use of lexical forms. Granted that the French forms *il* and *lui* are comparable by certain criteria, we may say, phonologically, that *lui* may occur in the position coinciding with main stress, while *il* is never used in a stress position of this nature—or, grammatically, that *lui* may be preceded by a member of the class of prepositions, whereas *il* is never encountered after a preposition.

So far, we have applied the principles of positional determination to predict the *occurrence* of forms. The advantage of such predictions will not be lost on the learner. Given a number of alternative forms, he is instantly guided toward selecting the correct form, rather than having to rely on luck or intuition in guessing what might be a likely candidate among twenty-five suggestions offered by his dictionary. He is made aware that a positional determination of the use of linguistic forms is nothing but a special case of a situational determination of certain comparable behavior patterns noticed in everyday life. Illustrating this point, we may say that, catching sight of the letter *b* in the word *book*, he is not likely to whistle, whereas that is precisely what he might do, or hear other people do, when seeing a petite brunette walk by, or after listening to a concert. In other words, the probability of hearing someone whistle is situationally determined. Against this background, the learner of a language, asked to predict the occurrence of speech forms by similar criteria of situational differentiation, readily understands the principle which underlies a correct selection of forms. He can grasp that what he is asked to do, i.e., develop a specific linguistic behavior pattern *as and when called for by a specific situation*, is really nothing very new and startling. Making situational, or positional, determinations of the use of linguistic forms, he will realize, facilitates his perception of other people's utterances and, at the same time, guides him in producing correct utterances of his own. It enables him to know what he can

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[1] See Charles C. Fries, *The Structure of English* (New York, 1952), pp. 9 - 64.

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expect to hear at a particular point in a chain of sounds, and how he is supposed to arrange his own utterance-components so that other people hear what they have a right to expect and when they are entitled to expect it.

Yet, predictive ability and correct usage of forms in certain arrangements, however fundamental to learning a language, represent only part of the objectives to be attained. The identification and circumscription of *meanings* is no less a basic part of the learning process. The student must be able to absorb the particular semantic content of a message, and he must be sure that what he himself says is meaningful in a specific sense in that it will elicit the response expected or one out of a determined series of expected responses.

Very often he may have to accomplish this by relying upon "feeling for the language" wherever extra-linguistic (i.e., predominantly social or cultural) factors are the determinant criteria. As much as possible, however, we must strive also in this field of language learning to replace intuition by perception. We accomplish this by correlating meaning and form. To the extent that discrete meanings can be shown to parallel discrete formal features, we follow procedures of positional determination similar to those outlined above.

There is, of course, nothing novel about meaning being determined by context. A *contextual* determination, in the traditional sense of the concept, requires not only awareness of the presence of the context but, in addition, a knowledge of what this context *means*. In contrast, a *positional* determination of the meaning of a form, as understood in this article, presupposes nothing as to the meaning of the determinant environment. We draw conclusions from this environment, not because we know what it means, but merely because it *occurs,* that is, because we hear (or see) it.

Continuing our comparison with situationally determined behavior-patterns, we may say that the meaning (or social significance) of whistling is contingent upon the specific situation involved. Directed at the petite brunette, whistling may call forth either satisfaction or indignation (whichever reaction it will be, depends upon the listener's "personal determination"). At the end of a concert, on the other hand, whistling— especially if accompanied (i.e., if more specifically deter-

mined) by applause—will invariably elicit a favorable interpretation. If, on the order of bilingual comparisons of meanings and forms, we were to make bicultural comparisons as to the message conveyed by whistling in, say, America and Spain, we should have to contrast whistling by American concert-goers, meaning "approval," with whistling by a Spanish audience, indicating "disapproval." Let us notice that we do not have to be informed about the "meaning" (the program, or the conductor) of the concert in order to determine the meaning of whistling: regardless of the specific circumstances surrounding the concert, whistling will *always* signify approval in this country and disapproval in Spain.[2] Once again,' by making the student of a foreign language aware of the situationally and culturally determined significance of behavior patterns in general, we give him an idea of the nature and relevance of positional determination of the meanings of speech forms.

Meaning-determinations of this kind state that Form A has Meaning X whenever Form A precedes, or follows (or, in the case of suprasegmental phonemes, coincides with) Form B. Whenever, in addition, Form B is found in the same grammatical environment (i.e., the same set of test-words) as may contain another form C, Forms B and C are said to belong to the same form class. As the determinant of the meaning of a word, a whole class of forms is preferable over a single form. Rather than having to learn a fact of the language attaching to just one form, the learner prefers to generalize a positional determination to the point of being able to say, "Form A has meaning X whenever Form A co-occurs with Form B or any comparable form (i.e., any form in the same class with B, such as Form C)."

[2] For the parallelism between determining the occurrence and meaning of whistling, on the one hand, and determining the occurrence and meaning of linguistic forms, on the other hand, the author is indebted to Dr. Robert Lado who suggested the study of behavior patterns as structured systems comparable to systems of communication, as well as intercultural comparisons of systems of behavior patterns, in a lecture delivered August 10, 1955, before the Linguistic Forum of the Summer Institute of Linguistics at the University of Michigan. Responsibility for statements of cultural distinctions and their interpretation in this article is, of course, the author's.

A few illustrations taken from various languages should, at this point, be helpful. Let us compare the following sequences in English for the purpose of setting forth various positionally determined meanings of the English word *have*:

Sequence (1) - *They have to tell a story.*
Sequence (2) - *They have a story to tell.*
Sequence (3) - *The manager had his clerks count tickets.*
Sequence (4) - *The manager had his clerks to count tickets.*
Sequence (5) - *The instructor had scored the tests.*
Sequence (6) - *The instructor had the tests scored.*

We identify at least four different meanings of *have*: obligation, in (1); posession, in (2) and (4); causation, in (3) and (6); and action in the past without causation or possession, in (5).

It can be seen from the above that the same structural meaning is expressed by substantially different sequences—for example, causation by (3) and (6)—whereas substantially similar sequences — e.g.,(3) and (4)—exhibit noticeable difference in the types of meaning involved, viz. causation and possession, respectively. This points to the meanings in question being connected, not with individual words, but with the words as representatives of certain classes in certain characteristic positions. We may thus make the generalizing statement that, for instance, the meaning of causation is expressed, wherever the word *have*, or any member of its paradigmatic class (*had, having* , etc.) occurs before *any* representative of the infinitive-subclass of the larger class of verbs (yet, without the word *to*) or before *any* representative of the participle-subclass of verbs (yet, with interposition of *any* representative of a class containing what traditional grammar-descriptions distinguish as nouns and pronouns). Letting I stand for "infinitive"; P, for "participle"; and N, for "noun" or "pronoun," the foregoing may be restated by these structural formulae: *have* + N + I and *have* + N + P, meaning causation ("causing" whatever action is expressed by I or P), as opposed to *have* + N + *to* , meaning posession ("possessing" whatever N expresses), and in contrast with *have* + P, meaning past-action (of the specific type indicated by the lexical meaning of P).[3]

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[3] Charles C. Fries, "'Have' as a Function Word," *Language Learning* I (1948), pp. 1-4, constitutes the basis for the discussion of *have* in this article.

By similar analyses of contrastive patterns, the learner may solve problems of semantic identification in French:

Sequence (1) - *Il en fait parler.*
Sequence (2) - *Il en a fait parler.*
Sequence (3) - *En fait, il a parlé.*

In (1), *fait* is marked (by the function word *il*) as a present-tense subclass member of the larger class of verbs; in (2), *fait* is marked (by the function-word *a*) as a member of the participle subclass of verbs; while in (3), *fait* (being outside the verb-expression marked as in the preceding sequence) is determined as being a non-verb.   Any representative of the paradigmatic class of *fait* (such as *faire, font,* etc.), before and with the infinitive of any verb, signals a causative meaning in French.   Any form of the paradigm of *a* (*avoir, ont*, etc.), before and with the participle of any verb, expresses the meaning of past-action (non-causative).   Thus, in (1) we have a statement of non-past causative action, whereas (2) signals action both causative and in the past.

It should be noted that the foregoing distinctions of English and ˙ French forms and meanings are not made with a view to attaining any particular purpose of analysis.   We distinguish between the two *have*-expressions of (3) and (4), not because there happens to be a formal distinction of comparable meaning-features in another language, such as *a* and *fait* in French.   Regardless of what speakers of other languages do, we clearly differentiate between the respective English patterns; we respond differently to, respectively, (3) and (4); and we are unhappy if, as the result of patterns (5) and (6) falling together in *the tests which the instructor had scored,* we cannot tell whether the instructor did his own scoring or if he had it done by someone else.   We do not, however, depend on translation into another language to demonstrate that we are dealing with different meanings of *have* or *fait.*

If, nevertheless, we do find it useful to make interlingual comparisons, and if we assume that certain elements of meaning, such as causation, are comparable in English and French, we may arrive at translation formulas simply by equating expressions positionally determined within each language.   Thus, English *have* + N + I renders French *faire* + I.

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Sometimes it will suit the teacher's convenience to eliminate the intermediate step of making determinations separately within each of the two languages being described concurrently. In adopting this shortcut, he takes cognizance of the principle that modified linguistic and pedagogic tasks require a modification of descriptive technique. Dealing with two languages simultaneously, rather than with one language alone, he is bound to notice that some monolingual differentiations of meanings become irrelevant, whereas certain other semantic distinctions acquire significance precisely and exclusively in certain bilingual descriptions. To illustrate the difference between monolingual and bilingual criteria and resultant differences in descriptive statements, it may suffice to consider two problems arising in what is perhaps the best-known type of bilingual study-translation;[4] more specifically in the "unidirectional" translation excluding *thèmes* and restricting itself to *versions*.[5]

In certain types of reading courses, for instance, it may be helpful to evaluate all Spanish forms against the background of English. At first glance, this may suggest a relapse into bad habits of the past when English was viewed through the looking-glass of a Latin grammarian. Yet, as long as we keep in mind that what we are doing is valid only for these two languages, and only when proceeding from Spanish to English and not vice-versa, and furthermore, that our English evaluation of Spanish forms states nothing about either English or Spanish viewed individually—as long as we restrict ourselves in this sense, a descriptive shortcut of this type is not only defensible but indeed often desirable.

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[4]Uriel Weinreich, *Languages in Contact* (New York, 1953), suggests a considerable number of bilingual study subjects of various types. See also the discussion of the pronunciation of /l/ in French and English, p. 42.

[5]In French school terminology, *thème* denotes the result of a translation from the student's own language into the language which he is learning, while *version* represents the opposite, namely, translation from the foreign language into the native. See Claude and Paul Augé, *Nouveau Petit Larousse Illustré* (Paris, 1956), pp. 1016 and 1078.

Describing Spanish alone, we should have to state that the "pronouns" *los* and *las* are by no means interchangeable. Yet, either one translates into English *them*, and with respect to the specific bilingual correlation of Spanish with English forms, *los* and *las* are semantically identical.

Conversely, a grammatically unsophisticated speaker of German will not see any difference in meaning between *während* in *während des Abends* and *während* in *während es schneit*. From the English-speaking student's point of view, these two *während* are, however, quite different. When he translates the first sequence, only *during* will fit in with the rest of his English words, while for similar structural reasons he is compelled to select *while* for *während* in the second sequence. (The determination of *during* or *while* as one or the other counterpart of *während* need not, of course, be made dependent on "what fits" in English; the use of either English form is predictable on the basis of *während* being marked as a member of one or the other of two German form-classes.)

Correlations of the above-mentioned type, as can be seen, are of fundamental importance. They apply to determinations of lexical no less than to those of structural meanings, indeed, to social meanings as well.[6] It is necessary, therefore, to establish at a very early stage a framework of form-classes and features of form-class identification. The learner will depend upon this framework when devising a plan of attack correlating form ("the thing to work *on*"), function of the determinant ("the thing to work *with*"), and meaning of the form to be determined ("the thing to work *for*").

Impatient students, and some "progressive" instructors as well, are often heard to challenge the wisdom of treating beginners to a list of form-classes and class-markers. "Who cares about theory—what we want is a practical command of the language!" But what could be more practical and more fundamental to developing linguistic skill, and what could be more meaningful, than learning as early as possible a set of concepts of grammatical classification for the specific purpose of determining the meanings of words and constructions?

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[6] For a distinction of meaning-types along these lines, see C. C. Fries, *The Structure of English*, pp. 293-296.

A grammatical determination of the occurrence and meaning of linguistic forms, while essential to the beginner, is, however, no less meaningful in later, more advanced stages of learning. Language on any level is a network of interrelating forms and functions. No matter, therefore, to what degree we carry the learning process, every time we determine the *use and function of an utterance, through the device of grammatical generalization,* we supply a new tool, another key that will open the door to a vast storehouse of further utterances identified in perceptive learning or created as the productive part of linguistic proficiency.

Beyond this, let us bear in mind that language teaching in high schools, colleges and universities is not carried out in isolation without reference to other fields of human activity. It represents but one out of many important items of a liberal-arts curriculum. If our educational objective is a synthesis of interrelated subjects of study, we will find that correlations of patterns of thought and linguistic expression, along the lines of human behavior and culture patterns, are meaningful to educators and students alike.[7]

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[7]For a more detailed exposition of the subject matter presented in this article, see Rud S. Meyerstein, *A Positional Determination of Semantic Equivalences in French, English, and German* (Unpublished Ph. D. dissertation, University of Michigan, 1954).

THE IMPORTANCE OF BILINGUAL DESCRIPTION
TO FOREIGN LANGUAGE LEARNING

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In the last fifteen years a sincere effort has been made to harness the results of structural linguistics to help the foreign language teacher. The results of this effort are frequently called the "new approach." According to Fries, "The fundamental feature of this new approach consists in a scientific descriptive analysis as the basis upon which to build the teaching materials."[1]

Linguists were becoming increasingly interested in the spoken language, and so were the language teachers. Phonemics could help in the teaching of pronunciation. The phonemes of the native language were compared with those of the foreign language, with an eye out for potential trouble spots. But the possession of two inventories of phonemes was not the cureall of all pronunciation problems.[2] The realization of this state of affairs is leading to increasing attempts to discuss the difficulties of the language learner when he meets a familiar sound in an unfamiliar environment or when the familiar sound enters into clusters in an unfamiliar way. Fries suggested in 1945:

> "This determining of the distinctive sounds that differ is only the first step (although an important one) in the scientific comparison of the language to be learned with

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[1] Charles C. Fries, Review of F. B. Agard and H. B. Dunkel. *An Investitation of Second Language Teaching, Language Learning II* (1949) p. 90.

[2] Yao Shen, "Some Departures from Strict Phonemic Representations, " *Language Learning* IV (1952-53) pp. 83-91.

Yao Shen, "Phonemic Charts Alone Are Not Enough," *Language Learning*, V (1955) pp. 122-129.

Einar Haugen, "Problems of Bilingual Description,"*Georgetown University Monograph Series on Languages and Linguistics,* No. 7 (1954) pp. 9-19.

the native language of the learner.   Each language has
not only its own set of distinctive sound features; it also
has only a limited number of characteristic sequences of
consonants and vowels which make up the structural pat-
tern of the syllables and words.   From this fact arises
the importance of finding the 'positions' in which the dis-
tinctive sounds can occur, and the 'clusters' which they
may form. " [3]

For a foreshadowing of this point of view note also Henry
Sweet in 1900:

"The first [consideration as regards phonetic diffi-
culties] is, that the difficulty of a sound depends more
than anything on whether it is familiar or unfamiliar,
which is not an intrinsic, but a relative or, we may al-
most say, an external difficulty.   To the unphonetic
learner all unfamiliar sounds are difficult, or even im-
possible—at least, he thinks so.   This applies also to
unfamiliar combinations of familiar sounds.   Thus even
initial (ts) may be difficult to English speakers, as well
as such combinations as (ʃtʃ) in Russian, because, al-
though (ts) is a familiar combination, it is unfamiliar
initial. " [4]

The comparison of not-necessarily-related linguistic struc-
tures has lately become a matter of interest also to linguists
working in the field of bilingualism.   Their goal is to de-
scribe what happens when two (or more) languages come in
contact.   To achieve this goal, Weinreich[5] and Haugen [6] have
started to work on methods of setting up bilingual descrip-
tions.[7]

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[3]Charles C. Fries, *Teaching and Learning English as a Foreign Language,* Ann
Arbor, 1945), p. 16.

[4]Henry Sweet, *The Practical Study of Languages,* (1900), pp. 61-62.

[5]Uriel Weinreich, *Languages in Contact,* (New York, 1953).

[6]Einar Haugen, "Problems of Bilingual Description. "

[7]i. e., the comparative descriptions of linguistic structures. Weinreich,
in *Languages in Contact,* uses the term "differential description"; Haugen,
in a review of Weinreich's book, *Language,* XXX (1954), pp. 380-388,
suggested the term "bilingual description. "   In an attempt to avoid the

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What these two authors have done represents a systematic treatment of phenomena of bilingualism which can be of further help to the foreign language teacher. It will be the purpose of this paper to briefly summarize the work done in bilingual description to date, and to illustrate the potential usefulness of this type of work with a partial bilingual description of English and Slovak from the point of view of the Slovak speaker learning English.

A brief outline of Weinreich's work along these lines, is found in the review of his *Languages in Contact* in the book review section of this issue.

Haugen, whose *Norwegian Language in America: A Study in Bilingual Behavior* appeared in the same year (1953), and whose book *Bilingualism in the Americas: A Guide to Research* is due to be published soon, also became interested in bilingual description. In his review of Weinreich's book, Haugen briefly mentions the importance of bilingual description "for the practical problems of teaching foreign languages."[8] In the article called "Problems of Bilingual Description," he shows how a bilingual phonemic description will involve the making of "comparisons of allophones position by position," and demonstrates how the types of interference can be summarized and systematized with the help of formulas. He maintains "that the identifications made between different phonemic systems by bilingual speakers can be predicted by careful bilingual description..." and "...that these can be tested by experimentation and observation, and can then be stated as diaphonic formulas in which the phonemes of the respective languages constitute the terms."[9] The relationship between the two parts of the formula he calls a diaphonic relationship, the members of the formula he calls diaphones of each other.

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serious problem of using "bilingual" in too many senses (e.g., the speaker of more than one language, an inscription in two languages), I would prefer "dialinguistic description" which would be an extension of Haugen's use of "diaphone" and "diamorph."

[8] Haugen, Review of Weinreich *Languages in Contact, Language* XXX (1954), p. 381.

[9] Haugen, "Problems of Bilingual Description," p. 19. For a more general discussion see also Kenneth L. Pike, *Language in Relation to a Unified Theory of the Structure of Human Behavior,* (Glendale, Calif. 1954), Section 2.6 "Predictability of Difficulties in Learning to React Emically to an Alien Emic System," pp. 18-19.

Let us now assume that we want to teach English to speakers of Slovak. (Translated into Weinreich's terms, the primary system is Slovak; the secondary, English.) In order to predict the interference we can make a bilingual description of English > Slovak,[10] i.e., of how units in the structure of English will be identified with units in the structure of Slovak. We can test our results by using an informant.

First we need to find or to make a phonemic analysis of each language.[11]

Summaries of English and Slovak Phonemic Systems [12]	
English	**Slovak**

<pre>p   t   k
b   d   g
    f θ s š   h
    v ð z ž
              č
              ǰ
m   n   ŋ
         l
         r
w   y</pre>
	<pre>p t t˝ k
	b d d˝ g
	  f s š x
	  v z ž h
	     c č
	     ʒ ǰ
	m n ň
	         y
	     l
	     l:
	     r
	     r:</pre>

<pre>   i   u
    ɪ   u
    e   ə   o
    ɛ   ɔ
    æ   a</pre>
	<pre> i: u:
	    i u
	    e o
	    e: a o:
	          a:</pre>

aɪ, au, ɔɪ	ie, ia, iu, uo
/t/ has a voiced flapped allophone in certain positions. The vowels have allophones of different length. Phonetically, /e/ and /o/ have an upward glide.	/n/ has a velar allophone before /k/ and /g/. Voiced consonants may not occur in final position. Two consecutive consonants must both be voiced or voiceless with the exception of liquids, semivowels and /v/. (/v/ could possibly be classed as a semivowel.)

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[10] There is some objection to the > on the basis that it implies time, but this is not really serious. In order that the Slovak speaker might identify one of his sounds with a sound in English, he will have had to

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With the help of adequately detailed analyses, each major allophone of each English phoneme is examined with careful attention to the limitations in its distribution, and attempts are made to predict with which Slovak phoneme it will be identified. The predictions are then plotted on charts like those below.[13]

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hear the English sound first. Haugen uses the > in his book *Norwegian Language in America* (U. of Pennsylvania Press, Philadelphia, Penna., 1953) to express loanwords, and later, in "Problems of Bilingual Description," he extends its use to bilingual description.

[11] For a discussion of the theoretical problems involved in choosing one rather than another phonemic analysis see Haugen, "Problems of Bilingual Description," pp. 12-19.

[12] The lists of the phonemes are complete. The comments are incomplete; they include only information pertinent to this paper, i.e. phonetic variants not used in the discussion below are intentionally omitted. The analysis of English is that used in Fries, *Teaching and Learning English as a Foreign Language*. It was chosen because it is an analysis of one dialect (one with which the writer is familiar), and because it is an analysis which is at present widely used in the teaching of English to foreign students. The analysis of Slovak is the writer's.

[13] Suggested by the charts in Henry M. Hoeningswald, "Diachronic Sound-Charts: A Technique to Represent Sound-Change," *Studies in Linguistics*, VI (1948) pp. 81-94. See also Einar Haugen, "A Note on Diachronic Sound Charts," SIL, VII (1949), pp. 63-66.

E \ S	p	b	t	d	k	g	f	v	s	z	š	ž	č	j	h	m	l	r	y	n	nk	ng
																					Phoneme Sequences	
p	∞																					
b	()♦	∞																				
t			∞	[tʳ]																		
d			()♦	∞																		
θ				∞																		
ð			()♦	∞																		
k					∞																	
g					()♦	∞																
f							∞															
v							()♦	∞														
w							∞															
š									∞													
ž									()♥	∞												
š											∞											
ž											()	∞										
č													∞									
j													()♦	∞								
h															∞							
m																∞						
l																	∞					
r																		∞				
y																			∞			
n																				∞		
ŋ																					(k g ()♦	∞

No English single phonemes will probably be identified with Slovak /t', d', ň, x, c, z/, but some English phoneme sequences not listed here are likely to be so identified.

E \ S	i:	i	e	e:	a	a:	u	u:	o:	o	ou	ey	ay	a:y	au	a:u	oy	o:y
						Single phonemes									Phoneme Sequences			
i	[ɪiˑ]	∞																
I		∞																
ɛ			∞															
æ				∞	[æ]													
a					∞	[aˑ]												
ʒ					∞													
ʊ							∞											
u								∞										
ɔ									∞									
o									[oˑ]	∞	[oᵘ]							
e												∞						
ar													∞	[aˑɪ]				
au															∞	[aˑu]		
ɔi																	∞	[ɔˑɪ]

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Read the above charts as follows: It can be predicted that English /p/ will be identified with Slovak /p/ in all environments. $_E$/b/ will be identified with $_S$/p/ before zero, with $_S$/b/ in all other environments. The flapped allophone of $_E$/t/ will be identified with $_S$/d/, the other allophones, with $_E$/t/. $_E$/ŋ/ will be identified with $_S$/n/ when occurring before $_S$/k/ and /g/, with $_S$/nk/ when before zero, with $_S$/ng/ elsewhere. (In indicating the language by the subscripts, I follow the usage of Weinreich.)

The charts presented here are incomplete, since they do not include such limitations on distribution as permitted consonant or vowel sequences. The charts could include these, but care would have to be taken to subdivide each of the charts into smaller, more manageable ones. An even better solution would be to make separate charts for vowel or consonant sequences. This, however, would not be particularly useful for English > Slovak. (The comparison of the consonant sequences of these two languages will be discussed below.)

We can now systematize the data appearing on the charts, so that the interference can be summarized in diaphones. The following is the summary for the consonant systems:

	Weinreich's classifications	Diaphones according to the Haugen system[14]	Read as follows:
1.	phone substitution	simple diaphones a. $_E$/h > h/$_S$ b. $_E$/m > m/$_S$ c. $_E$/l > l/$_S$ d. $_E$/r > r/$_S$ e. $_E$/y > y/$_S$	English /h/ is interpreted by Slovak speakers as Slovak /h/
2.	over-differentiation of phonemes	compound divergent diaphones a. $_E$/t > t;d/$_S$ b. $_E$/ŋ > n;ng/$_S$	Some allophones of English /t/ are interpreted as Slovak /t/, some as /d/
3.	under-differentiation of phonemes	compound convergent diaphones a. $_E$/θ,t > t/$_S$ b. $_E$/ð,d > d/$_S$ c. $_E$/v,w > v/$_S$	English /θ/ and /t/ are both interpreted as Slovak /t/
		d. $_E$/C_{vl}, C_{vd} ⊃ > C_{vl}/$_S$	All English voiceless consonants and final voiced consonants are interpreted as Slovak voiceless consonants

[14]Patterns for these formulas representing diaphones are found in Haugen, "Problems of Bilingual Description," p. 12 ff.

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Care must be taken to have only one phoneme on one side of the diaphone, otherwise the complexity of the formula could outweigh its usefulness. This may at times mean the setting up of more than one diaphone to cover all of the pertinent details. Notice, for instance, that diaphone 3d adds information which was intentionally omitted from diaphones 3b and 3c; and that diaphones 2a and 3a supplement each other.

Before the diaphones are set up in final form they should be checked with more than one informant. If the phonemic systems of each language have been compared carefully, there should be little need for revision. For example, it might have been incorrectly predicted that the flapped allophone of the $_E$/t/ would be identified with $_S$/r/. In listening to a native Slovak speaking English, such a prediction would turn out to be incorrect and would send us back to recheck our bilingual description at that point. Presumably, as more people work in this field, it will be possible to eliminate errors of prediction.

Ideally, our informants should be people who do not yet speak English, or who are in the first stages of learning the second language. If we use informants who have been trying to use English for a longer period of time, it will *seem* that there are more exceptions to our predictions. Thus, if the informant says /sťyu/ instead of the expected /stu:/ for "stew," it is probable that the informant has actually heard the word so pronounced and has learned it in that way. If the informant does not consistently identify $_E$/ə/ with $_S$/a/, as we predict he will do, it is important to check to what extent he has been influenced by English spelling.

If our primary goal in teaching a foreign language is not near-native perfection in pronunciation, but rather a pronunciation which avoids lexical misunderstanding, then not all of the three types of diaphones are equally relevant.

Phone substitution will not create problems in lexical understanding. Even though the phonetic realizations of $_E$/h/ are audibly different from $_S$/h/, no misunderstanding will result when $_S$/h/ is used in English words.

Over-differentiation of phonemes will also not be a problem. The Slovak speaker merely identifies allophones of an English phoneme as separate phonemes. Let us examine the

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two examples. The flapped allophone of $_E$/t/ is identified with $_S$/d/. Since in English there is no contrast between /t/ and /d/ in the position where the flapped allophone occurs (at least not in the dialect used in this paper, in which "bitter" and "bidder" have identical pronunciation), there will never be misunderstanding. $_S$/n/ has a velar allophone before $_S$/k/ and $_S$/g/; English has only /ŋ/ before $_E$/k/ and $_E$/g/. Though the phonemic interpretation is different, the phonetic result in this position is almost the same for the two languages. In other positions $_S$/ŋ/ is identified with $_S$/ng/ (or $_S$/nk/). This again would cause no difficulty, since in English $_S$/ŋ/ and /ng/ is a little used contrast.

Under-differentiation of phonemes is the real cause of serious pronunciation problems. If $_E$/t/ and $_E$/θ/ are under-differentiated and both are identified with $_S$/t/, we will get $_E$/bæt, bæθ > beːt/$_S$. If the voicing and voicelessness of final consonants is under-differentiated so that all final English consonants are identified with Slovak voiceless consonants we will further get $_E$/bæd, bæt > beːt/$_S$.

The predictions for the interference in vowels are a little more complex for these two languages. We can predict that English syllabic nuclei will be interpreted as long or short: $_E$/V > V, Vː/$_S$.

At first glance the two sets of descriptions of the vowels seem almost parallel in position, with the exception of an extra front vowel in English. Here, more than ever it is important to check the allophones, or phonetic realizations of the phonemes. In Slovak, for example, there is a difference in the height of the vowels /e, eː/, but there is also a difference in length. In the phonemicization, length is the distinctive feature. In the English vowels /ɛ, æ/, which correspond to this position, height is the distinctive feature. It can be predicted that $_E$/ɛ > e/$_S$ and $_E$/æ > eː/$_S$. This, however, can be only partially true. Trager and Smith[15] most often give six allophones of different length for any given English syllabic. It can, therefore, be predicted that the longer allophones of the English vowel will be identified with a Slovak long vowel, and the shorter ones with a short vowel. For example, the

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[15]George L. Trager and Henry Lee Smith, Jr., *An Outline of English Structure,* SIL Occasional Papers 3, 1951.

shorter allophones of $_E$/æ/ as in $_E$/hæt/ will also be identified with $_S$/e/ while the longer ones, as in $_E$/kæn/ will be identified with $_S$/e:/. The over-differentiation of $_E$/æ/ would by itself create no difficulty in understanding, except that it now produces an under-differentiation--$_E$/ɛ, æ > e/$_S$ — and hence a problem.   The two diaphones now are as follows: $_E$/ɛ, [ɔɛ̌] > e/$_S$; $_E$/[æ·] > e:/$_S$.   Similar problems can be predicted for the other vowels.

The phonetic realization of $_E$/e/ will cause it to be identified with $_S$/ey/ and hence no problem.   It is probable that the more diphthongal allophones of $_E$/o/ will be identified with $_S$/ou/.   This will bring about an over-differentiation, but no problem.

The English diphthongs will probably be over-differentiated in that their first element will be identified sometimes with a long and sometimes with a short Slovak vowel.   This again will entail no lexical misunderstanding.

The testing of the vowel diaphones with an informant, though it confirms most of these predictions, shows how very difficult it is to predict at which point on Trager and Smith's scale of length a vowel will be interpreted as long by a speaker of Slovak.   In other words, the informant does not automatically interpret the three shorter allophones of an English vowel as short, and the three longer ones as long.   If the informant has had long contact with English, he will be consistent in choosing always a long, or always a short vowel for the same word.

Slovak and English both have many consonant sequences. A comparison of these in initial, medial and final positions gives the following predictions: 1. The initial and medial sequences will give no difficulty except to the extent that the consonants in the sequence are under-differentiated. 2. Since all final consonants in Slovak must be voiceless, the pre-final consonants must follow the rules of Slovak consonant sequences as stated under the inventory of phonemes above.   Thus we expect and get $_E$/ragz > raks/$_S$, $_E$/beəz > beyc/$_S$ (Note that $_C$/-ðz - -ts/ and is thus identified with $_S$/c/). 3. In final position Slovak does not have any consonant sequences as long as $_E$/-mpst/.   We can expect a shortening of the sequence.   Actually, we get $_E$/-mpst > -mps/$_S$.

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A complete bilingual description would require that this phonemic part of the description be done in greater detail and that it be followed by a bilingual description of the two morphemic systems and of the positions in which morpheme classes occur.[16]

Now that procedures for making bilingual descriptions are being more clearly defined, it is hoped that linguists and teachers trained in linguistics will contribute to the making of such descriptions. Contributions in this field will have both scientific interest and pedagogic usefulness.

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[16] For a correlation on and above the morpheme level of French and English as well as German and English written utterances, see Rud S. Meyerstein, "A Positional Determination of Semantic Equivalences in French, English and German," University of Michigan Doctoral Dissertation, 1955.

STRUCTURAL AMBIGUITY: A NOTE ON MEANING AND THE LINGUISTIC ANALYSIS OF LITERATURE
With Illustrations from E. E. Cummings

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Many linguists in the past years have been floundering on the assumption that language can be analyzed without consideration of meaning. C. C. Fries discusses this misconception in his article entitled "Meaning and Linguistic Analysis." [1] There he points to the fact that throughout *Language*, the book which has laid the foundations for modern American linguistics, Bloomfield insisted on a consideration of meaning. Fries fortifies his position by means of pertinent statements from this work:

> Man utters many kinds of vocal noise and makes use of the variety: under certain types of stimuli he produces certain vocal sounds, and his fellows, hearing these same sounds, make the appropriate response. To put it briefly, in human speech, different sounds have different meanings. To study this combination of certain sounds with certain meanings is to study language. . . . .
> . . . .
>
> It is important to remember that practical phonetics and phonology presuppose a knowledge of meanings: without this knowledge we could not ascertain the phonemic features. [2]

Fries concludes his essay by writing:

> Although a certain control of specific kinds of meaning seems to me essential for various parts of linguistic analysis I should like to insist that as a general principle any use of meaning is unscientific whenever the fact

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[1] Charles C. Fries, "Meaning and Linguistic Analysis," *Language*, XXX (1954), pp. 57-68.
[2] *Ibid.*, p. 59.

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of our knowing the meaning leads us to stop short of finding the precise formal signals that operate to convey that meaning.[3]

Thus, with the realization that both meaning and sound make up language and that linguistic analyses presuppose a knowledge of meaning, comes the warning that meaning must not hinder us in finding the "precise formal signals that operate to convey that meaning." This, it seems to me, has important implications for those who feel modern structural linguistics may have a place in literary criticism.

In the same article, Fries recognizes that there are two types of meaning. The "social-cultural" meanings are the "recurring responses to unique whole utterances or sequences of utterances;" and the "linguistic meanings" consist of "lexical meanings within a frame of structural meanings--that is, of the stimulus-response features that accompany contrastive structural arrangements of lexical items."[4] Since the linguistic meaning is further divided into the lexical and the structural meanings, we can deal with three types of meaning that make up the total meaning of an utterance: the social-cultural, the lexical and the structural.

Within these three types of meaning ambiguity can exist. On the social-cultural level, for instance, ambiguity will exist when an American or a European reader views a Japanese poem in the light of his own literary and cultural tradition but at the same time knows the Japanese cultural tradition of which the poem forms a part. Lexical ambiguity, on the other Hand, can be said to occur when a word is contained within its context in such a way that the reader reacts to more than one of its lexical meanings. Freud's example, "This girl reminds me of Dreyfus. The army does not believe in her innocence,"[5] is excellent, for the reader must react to two meanings of the word "innocence" if the utterance is to be humorous.

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[3] *Ibid.*, p. 68.

[4] *Ibid.*, p. 66.

[5] Sigmund Freud, *Wit and its Relation to the Unconscious* (New York, 1916), p. 46.

Structural ambiguity, however, is the type most suited to a full explication by linguists since the tools of the linguists have been developed to such an extent that they have gone a long way in analyzing English structure. Structural ambiguity occurs when the grammatical devices of a linguistic construction signal more than one structural meaning. For example, in the want ad, "For sale: bed for antique lovers," any grammatical or intonation signal that would label *antique* as definitely a Class 1 or a Class 3 word [6] is lacking, and the statement is structurally ambiguous. It is also lexically and social-culturally ambiguous, but these ambiguities are largely dependent upon the two form classes to which *antique* can belong.

But this example is very likely a "mistake" on the part of the author. In literary criticism we are concerned with those structural ambiguities which are purposeful within the literary work that contains them. A brief statement of the logical method for locating and validating structural ambiguity is as follows. The literary work of a contemporary American author can be analyzed structurally according to the form classes set up by Dr. Fries in his analysis of modern American English[6] in order to discover which formal signals are lacking or which overlap to create cues for several reactions on the part of the reader. This indicates that the syntax allows for the ambiguity. The punctuation, whose normal function is to record as far as possible intonation signals and to join and separate grammatical structures, should point to the ambiguity or at least allow for it. And the meanings derived from the ambiguity must fit in with and enhance one of the possible interpretations of the poem in which it is contained. If these three conditions are met, the ambiguity can be considered valid and functional. However, further recurrences of this ambiguity in the work of the author will substantiate this ambiguity as an intentional artistic device.

I should like to illustrate this method by using two poems by E. E. Cummings, whose poetry is sometimes considered difficult to interpret because of its ambiguity and unconventional punctuation.

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[6] C. C. Fries, *The Structure of English* (New York, 1952).

Poem 19 from *50 Poems* is a description of a town char—acterized by its non-individualistic inhabitants. The town is tradition-bound, for "that here" which the poem describes "was a town" where "the streets are so ancient the houses enter the people." Symbolic of the uninteresting and conventional people which dwell in such a town are the structural ambiguities which link several of the sentences so that, like the people, the sentences cannot be distinguished from each other. Among these ambiguities are Class 1 words which are patterned both with a function word of Group F to form a phrase and as the subject of a Class 2 word.[7] The following lines contain two such Class 1 words:

> and this light is so dark the mountains
> grow up from
>
> the sky is so near the earth does not
> open her
> eyes[8]

Sky is patterned before the Class 2 word *is* and is tied to it as subject. Line and stanza division separate *sky* from *from,* but the syntax demands that *sky* also be patterned with this function word. The result is that the cut between sentences must be made both before *the* and after *sky*. *Earth* is patterned between *near* and *does* and on the same line with them. *Earth* thus functions as subject in an included sentence and as the Class 1 word with a function word F in the preceding sentence. It is important that *earth* is patterned on the same line with *near*, for any mark of punctuation would pattern *near* only as a Class 4 word modifying *is*.

This ambiguity recurs in the opening lines of a poem in Cummings' latest book of poetry, where it occurs in a complex of structural ambiguity:

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[7] I use Dr. Fries' terminology rather than the traditional grammatical terms because they are more precise and are based on formal characteristics. It is difficult to treat ambiguity with terms that are themselves ambiguous. However, we can read "noun" for Class I, "verb" for Class 2, "adjective" for Class 3, "adverb" for Class 4, and "preposition" for Function Word, if we define those terms according to the formal structural aspects described in Chapter VII of *The Structure of English*.

[8] E. E. Cummings, *50 Poems* (New York, 1940), Poem 19.

    in

    Spring comes (no-
    one
    asks his name)

    a mender
    of things [9]

The word *in* is patterned in a stanza by itself, emphasiz-
ing the importance of that word and separating it from the two
words with which it is ambigously connected. As a Class 4
word, it modifies *comes* , and *Spring* is then the subject of
comes . *Mender* is, in this reading of the lines, in apposition
to the subject: *Spring* is personified as "a mender of things,"
and the lines could read, without the excitement of the peculiar
syntax and the attendant ambiguities, "Spring, a mender of
things, comes in." *In* is also patterned as a function word
of Group F and, with the Class 1 word *Spring*, forms a phrase.
Thus, *mender* is also the subject of *comes*. In this more literal
reading, *Spring* is not personified as a mender but remains a
season and the *mender* is an unknown personality who revives
life.

The structural ambiguity of *Spring* has meaning within
these lines. If it is the subject, the lines are boisterous; *in*
is emphasized, and this initial accent gives life to the lines.
No-one need ask his name because everyone is aware that it
is Spring that revives life so quickly and with such a flourish.
If, however, *Spring* is patterned with *in* and the latter is a
function word of Group F so that *mender* is the subject, the
reading is of a much quieter nature. *In* is not accented, and
the initial surprise is gone. The mender works quietly. No-
one asks his name, perhaps because he is so unobtrusive in
his work or because no-one can understand the mysteries and
miracles which he quietly produces. This dual interpretation
of spring as both a wonderfully happy, noisy personality, but
containing at the same time a quiet mystery, reflected in the
Class 3 words found in the other lines of the poem: *eager,
patient, bright, soft* and *quick*.

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[9]E. E. Cummings, *Seventy-one Poems* (New York,1950), Poem 62.

STRUCTURAL AMBIGUITY

The preceding paragraphs have shown that a linguistic analysis can shed new light upon certain poems. It must be pointed out, however, that the method and the examples involved more than a simple collecting of linguistic data. The linguistic facts were initial, but they pointed to meanings; and these meanings were not only structural, but also lexical and social-cultural. In other words, the linguistic facts were involved in the total meaning of the literary work.

To note facts such as recurrent sound sequences, the distribution of lexical items, wrenched syntax and structural ambiguity is important linguistically; to demonstrate that these facts are meaningful within the literary work at hand is literary criticism.

SOME STRUCTURAL PROBLEMS FOR TAGALOG STUDENTS IN ENGLISH

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The causes of certain of the native Tagalog speaker's difficulties in mastering English constructions can be identified through the pin-pointing of structural differences between Tagalog and English. Recognition of these causes can in turn be of great aid in effective classroom teaching. Observation of freshman writing done in the English Department of the University of the Philippines showed, for example, that frequent errors could be traced to direct word-for-word translation from the native dialect. Some of the most predictable of these errors occurred (1) in lack of concord in patterns involving tied Class I and Class II words, (2) confusion between the Class II words *is* and *was* and Class II words with and without a dental suffix [t-d-ɨd], (3) misuse of the pairs of function words *which/who, will/would, can/could,* and (4) omission of the function word *a/an* in medial positions in certain patterns.

Errors in the lack of concord of tied Class I and Class II words were most frequent.[2] In English structural patterns an uninflected Class I word can be followed by an inflected Class II word. Thus, in the pattern *the boy plays* both the uninflected Class I word *boy* and the inflected Class II word *plays* indicate singular number. In *the boys play,* on the other hand, the *s* ending of the Class I word gives it plural meaning; absence of the *s* ending of the Class II word also signals plurality in this instance. In each of the above examples, then, the Class I and Class II words are tied by formal concord. The *s* inflection of the Class I word and the *s* inflection of the Class II word, moreover, are mutually exclusive.

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[2]See Charles C. Fries, *The Structure of English* (New York, 1952), p. 144ff.

In Tagalog, plurality of Class I words is commonly sig-
nalled by a preceding function word *manga*. Class II words are
invariable so far as signalling number is concerned. Thus,
the same Class II word is employed in the third person singu-
lar and the third person plural:

Tagalog[3]	English
Ang bata ay naglalaro	The boy plays (is playing)
Ang manga bata ay naglalaro	The boys play (are playing)

A fairly large number of predictable errors in English
therefore occurred because of the failure of Tagalog students
to observe contrasts in formal concord that do not exist in
their native dialect. Uninflected Class I words were tied to
uninflected Class II words (*the boy play*); and conversely, in-
flected Class I words, to inflected Class II words (*the boys
plays*). Errors also occurred in the use of markers with
plural instead of singular Class I words (*every pages of this
magazine*), and the use of markers with singular instead of
plural Class I words (*these person do not know . . .*). Instances
were also found of the use of singular antecedents with plural
Class II words (*a slender body, which give her . . .*), and the use
of plural antecedents with singular Class II words (*her eyebrows,
which appears . . .*).

Structural contrasts of English and Tagalog Class II forms
accounted for considerable confusion between the use of *is* and
was and for the indiscriminate use of Class II words having
the dental suffix [t-d-ɪd] in their past form. The misuse of
is and, *was* in English can be attributed to the lack of an item
or items in Tagalog functioning grammatically in this way.
The particle *ay* cannot be regarded as a copula even though
Tagalog students of English frequently equate it as such. It
is merely a signal indicating one of the two common types of
Tagalog constructions: (1) the order of subject and predicate
preceded by *ay*, and (2) the order of predicate and subject. [4]
Thus

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[3]For the Tagalog the writer is indebted to S. V. Epistola and Paz
Dominado.

[4]See Leonard Bloomfield, *Language* (New York, 1933), pp. 173, 201.

Tagalog	English
(1) Siya ay kapatid ko	He(she) is(was) my brother (sister)
(2) Kapatid ko siya	(same meaning)

In order to restrict an utterance such as this specifically to past lexical time, Tagalog commonly employs additional time expressions as in the following example:

Tagalog	English
Siya ay pagod	He(she is(was) tired
Siya ay pagod kahapon	He(she) was tired yesterday

These examples indicate not merely the lack of contrasts in Tagalog of the English Class II forms *is* and *was*, but their complete absence in the Tagalog dialect. They also serve to show why Tagalog speakers often confuse the different substitute forms *he* and *she* for which there is only one form in the native dialect.

A large number of errors occurred in the incorrect use of the general and the [t-d-ɪd] past forms of Class II words (*I finish elementary school four years ago*). Errors in this category were about equally distributed. The [t-d-ɪd] forms, in addition, were frequently used instead of the *to* + simple form of the Class II word (*he gave us the opportunity to introduced ourselves* and *he let him repeated the lesson.*), as well as with function words like *could* and *should* (*. . . whether we could helped with the project*). In the *had* + (t-d-ɪd) pattern the suffix tended to be omitted (*I had been consider for the office*).

These particular errors cannot be specifically attributed to an overall lack of contrastive features in the dialect such as characterize the other errors discussed in this article. Tagalog employs distinct signals for what in English would be the so-called present and past tenses, but unlike English which generally adds the suffix [t-d-ɪd] to the basic form of the Class II word, Tagalog employs infixation preceding the first vowel of the Class II root form to indicate what corresponds to the preterit form in English. The Tagalog root form has no lexical correspondence to the English root form, but it can be used as a lexical item.

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Tagalog		English
Root form:	lakad	("a walking")
Preterit:	lumakad	walked

The Tagalog speaker, therefore, must learn a new preterit form with entirely different contrastive morphological features.

Instances similar to the confusion of *is/was* were found in the use of the function words *will/would*, *can/could*, and *who/which*. Here again the explanation seems to be that particular contrastive forms in English do not have a counterpart in Tagalog:

Tagalog	English
Gagawin ko iyon	I will (would) do it
Makakapunta ako	I can (could) go
Ang batang lalaki *ng* nararirito ay aking kapatid	The boy *who* is here is my brother
Ang pluma*ng* nasa ibabaw ng hapag ay akin	The pen *which* is on the table is mine

The particle *ng* serves for both the function words *who* and *which*. It may be added here that errors involving the choice of *who* or *which* were considerably less than those involving *will/would* and *can/could*, possibly because the function word *that* can commonly be used as an alternate for the substitution forms *who/which*.

Several constructions were found omitting indefinite markers of Class I words where English normally uses them. An analysis of Tagalog revealed a lack of what would directly correspond to such markers in English. Tagalog has a form *ang* that corresponds to the function word *the*, but there is no form in the dialect that can be specifically regarded as a counterpart of the function words *a*. The Tagalog *isang* has a different lexical meaning. Thus

Tagalog	English
Ang batang lalaki	The boy
Isang batang lalaki	(One) Any one boy
------------------	A boy

The fact that the errors in English all occurred in medial positions of particular patterns can be attributed to the fact

that Tagalog constructions usually employ markers of what in English would be Class II words in an initial, though not usually in an internal, position of a pattern.

Tagalog	English
Ako ay mayroong lalong malaking layunin	I have( ) greater aim
I have much big aim	I have a greater aim
Ako ay walang ama	I do not have( ) father
I without father	I do not have a father

The observations made here tend to indicate the importance of pin-pointing contrastive structural patterns in exploring certain recurrent errors due to the distinctive structural characteristics of two different language systems. For the most part, the common errors presented here were due to the lack of Tagalog of contrastive structural patterns found in English. Proper application in the classroom of the findings of a comparative structural analysis might well reduce the number of errors predictable on the basis of the structural dissimilarities of two particular languages -- in this case, Tagalog and English. Indeed, extensive research on the phonemic, as well as on the morphologic and syntactic levels of English and the major Philippine dialects would be most profitable, inasmuch as English is the medium of instruction in all public schools and in all colleges and universities of the Philippines.

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THE CLASSROOM DOOR

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The classroom door is an important line of demarkation in the profession of a modern language teacher. His duties vary in relation to the specific side of the door. That is, what he does as a teacher before and after he enters the door can be extremely different. It is not the purpose of this article to exhaust the imperatives required of a modern language teacher. Rather it is to raise a few fundamental questions for the self-examination of such teachers.

There are two questions the modern language teacher must without choice ask himself before he enters the classroom. The first one is, "Have I done a comparative linguistic analysis between the students' native language and the foreign language they are going to learn?" If the answer is "No," it is obvious that he has not given himself up-to-date preparation. If his answer is "Yes," he must go on and ask himself a consequential question: "Is my comparative analysis an item-for-item one or is it a related one?" An item-for-item comparison is certainly better than no comparison. But it is not as satisfactory as a related one. Examples are given below to show the difference.

In the matter of the comparison of sounds to be found in English and in Mandarin Chinese, one will notice that in both languages there is the sound [f]. But to know that the sound [f] is found in both languages is not enough. Further analysis will show that in English, [f] can occur in utterance initial and utterance final as in *fine* and *knife*. In Chinese, [f] occurs in utterance initial as in "fàn"(cooked rice) but not in utterance final. Besides, in English, there are also the following initial consonant clusters with [f]:

fr-	freedom	fl-	flee
fy-	fuel	sf-	sphere

and the following final consonant clusters:[1]

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[1] See Charles C. Fries, *Teaching and Learning English as a Foreign Language,* (Ann Arbor, 1946) pp. 17-19.

[-ft]	soft	[-lf]	self
[-fs]	laughs	[-mf]	mymph
[-fθ]	fifth	[-lfs]	golfs
[-fts]	lifts	[-mfs]	nymphs
[-fθs]	fifths	[-lft]	engulfed

None of the above consonant clusters, either initially or finally, can be found in Mandarin Chinese. Thus, to say that English and Mandarin Chinese both have [f] and therefore it can be assumed that there would be no trouble in teaching [f] to Chinese speakers is only an item-for-item comparison. One must see how [f] patterns with other sounds both in English and in Mandarin Chinese.

This related comparison is also important with regard to morphology and syntax. To know that English uses inflection, function words, and word order to indicate "structural" [2] relations and Mandarin Chinese uses function words and word order is fine, but not enough. English teachers of the last generation who taught the students to memorize "bring, brought, brought; buy, bought, bought; teach, taught, taught" were only teaching inflection as units instead of the relationship of each one of these words in sentence patterns. For example: "I bring books to class everyday" and "I brought books to class (everyday) last week." [3] For the teacher who teaches English as a foreign language to Mandarin Chinese speakers, for example, it is additionally necessary for him to compare the "structural" devices used in sentence patterns in both languages. Four examples are given below:

Example 1   English: You   study   He studies
              Chinese: nǐ   niàn   tā niàn

A unit-for-unit comparison between the first set of sentences will show that English and Chinese can be interpreted as having neither inflectional difference nor word order difference in "You study" and "nǐ niàn."

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[2] See Charles C. Fries, *The Structure of English,* (New York, 1952).

[3] See *Patterns of English Sentences,* English Language Institute, University of Michigan, 1953, and *An Intensive Course in English for Chinese Students,* by Charles Fries and Yao Shen, English Language Institute, University of Michigan, 1946.

Example 2	English:	Do	you	study
	Chinese:	nǐ	niàn	ma

In English, the question function word *do* comes at the beginning of the sentence; in Chinese, the question function word *ma* comes at the end of the sentence. The word order is different, although the use of a function word to indicate a question is the same.

Example 3	English:	You	studied
	Chinese:	nǐ	niàn	le

In English, tense is indicated by inflection; in Chinese, tense or aspect is indicated by function word and word order. The function word here is *le*, and *le* comes after *niàn*.

Example 4	English:	Did	you	study
	Chinese:	nǐ	niàn	le	ma

In English, the word *did* has three syntactical functions. First, it indicates tense; it is not *do* or *does*. Second, it serves as the function word added to a statement to make the sentence a question. Third, it has word order importance. That is, *did* comes at the beginning of the utterance. In Chinese, tense or aspect is indicated by the function word *le*; the question is signalled by the function word *ma*. The word order is: *le* comes after *niàn*, and *ma* comes after *le*. The above four examples have shown that the morphology and syntax of a language are not made up of a list of units but a list of related units.

	English		Chinese		
1		You study	nǐ	niàn	
2	Do	you study	nǐ	niàn	ma
3		You studied	nǐ	niàn	le
4	Did	you study	nǐ	niàn	le ma

In the teaching of a foreign language, one system of related units must be compared with another system of related units.

The subject of vocabulary must be treated in the same way. Charles C. Fries' emphasis on no word-for-word translation is of serious linguistic significance. The Spanish parting

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greeting "adiós" can be translated into English as "Goodbye."
But a Spanish speaker learning to speak English will greet
the friend he meets at night with "Good night." This is per-
fectly logical. If he meets his friend in the morning, the
greeting words are "Good morning"; in the afternoon, "Good
afternoon"; in the evening, "Good evening"; therefore at night,
"Good night." He does not realize that "Good night" is an
alternant for "Goodbye" in the evening or at night. It is not
enough to be aware of the danger of word-for-word translation,
one must also understand expressions as elements in the
total cultural pattern of the people. Two people meet each
other while walking. The English-speaking person says,
"Good morning,""Good afternoon," "Good evening," "How are
you?" "Hello," or "Hi." The Spanish-speaking person says,
"Goodbye." The former is thinking of the meeting aspect of
the situation; the latter is thinking of the parting aspect of
the situation. And in the latter's native language he says,
"adiós." Consequently in his foreign language he says, "Good-
bye." In other words, the way people are brought up to look
upon the same situation can be different or patterns of cul-
ture can be different. And the linguistic expressions used
thus can be different too.

From the above illustrations, we see that the foreign
language teacher not only analyses the two languages con-
cerned, he also compares them. In his comparison, he not
only makes a unit-for-unit comparison, he also looks upon
the language as a system of related items in sounds, in
morphology and syntax, and in vocabulary. Not only is he
aware of linguistically related units, he is also keenly sensi-
tive to the fact that language and culture are tied together.

The role of the modern language teacher once inside the
classroom door is entirely different. His duty is primarily—
in fact, fundamentally—the application of such techniques in
which the results of linguistic research are used. Such re-
sults come from the work he has done before he enters the
classroom. His aim is to help the students to attain oral
control of the language with the least waste of time and ef-
fort and the maximum amount of achievement. There are
some essential points that he must always keep in mind. The
most important question is, "Who is learning to speak the

language?" And the answer had better be "The students." If so, the next question he should ask himself is, "Am I giving the students the maximum opportunity to practice, since no one can learn to speak a language without production."

The goal of giving the students the maximum opportunity to practice can be reached by a combination of affirmative and negative approaches. First, explanations should be short and clear and without waste of words. Many useful examples must be given so that students can repeat with the teacher and by themselves. Second, inside the classroom is not the place for the teacher to exhibit his knowledge *about* linguistics. It is essential for him to remember that any amount of time he spends talking *about* linguistics, the aim of which is not toward the practice of the language by the students, is a mark against his professional skill. He is taking away from the students time needed for gaining oral control. A cardinal sin! Third, a modern language class is primarily not a class *about* the language but a place where the students have the opportunity to *produce* the language. There are classes which are conducted in the following way with the following result:

Teachers: The vowel sound [i] in English is high, front, unrounded, and open.
The vowel sound [ɪ] in English is high, front, unrounded, and closed.

		Front		
High	Open	[i]		
	Close	[ɪ]		

What kind of a vowel sound is the English [i] ?

Students: High, front, unrounded, and open.

Teacher: What kind of a vowel sound is the English [ɪ] ?

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Students: High, front, unrounded, and closed.

Then the teacher repeats some of the examples with the students in which the sole difference is [i] and [ɪ] , i.e., feel, fill; meal, mill.   The next day, the students are asked what kind of vowel sounds [i] and [ɪ] are.   The students give the appropriate description of each sound.   All is very well, except the class should spend more time on the production of the sounds and less on the description of them.   Knowing the description of the sounds does not always result in a satisfactory production of the sounds.   Students that have gone through such classes often show very low scores in aural comprehension and invariably show lower scores in oral production.

A constructive remedy for such a situation is decreased emphasis on exposition and discussion of the nature of the sounds and increased emphasis on exercises toward production; i.e., repetition with students in unison, repetition with students individually, hearing exercises in which students are to identify the sounds to be distinguished, and production exercises in which they are requested to produce such sounds. [4] Thus time spent *about* the language is reduced to a minimum and time spent on the *production* of the language is increased to a maximum.

A related fact concerning this matter of *about* the language is the avoidance of waste of time discussing linguistic features.   Often time is spent on the description of linguistic features in the students' native language.   Such a discussion should be reduced as much as possible.   First, students are here to learn to speak the foreign language.   They are not here to get the linguistic analysis of their native language.   Second, technical linguistic description is often above the linguistic receptive ability of the class, and therefore the teacher leaves a certain number of the students uninterested, often bewildered, and not particularly impressed.   Third, often the students can mistake the description of their native language

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[4] See *English Pronunciation*, English Language Institute, University of Michigan, 1954.

as a criticism of it. Even if the students should admit that the teacher's description is correct, there is always a time when some student can "dig up an exception" to the teacher's general description and a fruitless discussion begins. Fourth, the teacher may succeed in impressing the students with how much he knows *about* their native language, but he has then failed to help them acquire more *productive* skill in the foreign language. All these can be avoided if the teacher concentrates on the students' production of the language.

The purpose of this article is not to exhaust the techniques of linguistic analysis and language teaching, both of which are required of the modern language teacher. It is only to emphasize the classroom door as a line of demarkation or a signal to remind the modern language teacher that his duties before and after he enters the room are different and that the two aspects of his responsibility must not be confused.

REVIEWS

WEINREICH, URIEL, Languages in Contact: Findings and Problems. (Publications of the Linguistic Circle of New York - Number 1.) Pp. xii, 148. New York, 1953.

It has long been recognized that good foreign language teaching materials must be based on careful descriptions of both the language of the learner and the language to be learned, and that these descriptions must then be compared. On the basis of this comparison teaching materials can be prepared with special emphasis on the places where these languages differ, since these are the places where the learner will have difficulty. Weinreich would say that these are the places where the learner will encounter interference.

Weinreich is not, however, primarily interested in being helpful to the language teacher. He is interested in describing, for its own sake, what happens when two languages come in contact within an individual, i. e., when an individual learns, or has learned, another language. (Nor were the pioneers in structural linguistics primarily interested in helping the language teacher, yet where would the language teacher be now without having applied their findings?) It is therefore very good, if not imperative, that a person preparing language teaching materials examine this and other recent contributions of descriptive linguists working in the field of bilingualism.

If the author of *Languages in Contact* were writing for the language teacher, he might say that the learning of a second language involves a language contact situation. The learner, in this situation, interprets the second language through the structure of his "primary" (i.e., native language) system, which means that there is interference caused by his primary system. Interference phenomena, Weinreich states on page 1, are "those instances of deviation from the norms of either language which occur in the speech of bilinguals as a result... of language contact..." For this type of contact situation, the author suggests on page 2 that

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Great or small, the differences and similarities be-
tween languages in contact must be exhaustively stated
for every domain—phonic, grammatical, and lexical—as
a prerequisite to an analysis of interference. It might
even be fruitful to draw up general canons of *differential
description*.

How to proceed in making this exhaustive statement of
differences and similarities, i.e., how to make a differential
description of the phonemic systems, is partly worked out on
pages 14 to 20. Weinreich makes it clear that two unidirec-
tional descriptions can be made for any two languages in con-
tact—one for speakers of language A coming in contact with
language B, and one for speakers of language B, coming in
contact with A. (It follows that the teacher of a particular
language would be interested in only one of the descriptions.)
The languages which the author uses for illustration are
Romansh and Schwyzertütsch. His first description is for
Romansh as the primary system and Schwyzertütsch as the
secondary, [1] whereas his second description takes Schwyzer-
tütsch as the primary and Romansh as the secondary system.[2]

On the basis of these descriptions, Weinreich classifies
"phonic interference" (interference in the sound system) into
four types: (1) under-differentiation of phonemes; (2) over-
differentiation of phonemes; (3) reinterpretation of distinctions;
and (4) phone substitution. The reviewer's interpretation of
these classifications is as follows: Under-differentiation of
phonemes means to the teacher that the learner of the new
language under-differentiates, that is, uses his native one
phoneme where the foreign language has more than one, as
when a Spanish speaker makes English "sheep" and "ship"

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[1] This would be useful to the teacher of Schwyzertütsch dealing with
speakers of Romansh. Haugen would here use the formula Schwyzer-
tütsch > Romansh. See my article elsewhere in this issue.

[2] This would benefit the teacher of Romansh confronting speakers of
Schwyzertütsch. Haugen's formula would be Romansh > Schwyzer-
tütsch.

homonyms. Over-differentiation of phonemes means that the learner uses two or more of his native phonemes where the foreign language has only one, as when a student from a country that has both aspirated and unaspirated stops uses his /t/ and /tʰ/ for English /t/. Since these native phonemes usually correspond somewhat to allophones in the foreign language, the learner, even though he over-differentiates, will be understood. Phone substitution means that the learner substitutes his native phoneme for a foreign language phoneme whose phonetic realization is more or less similar. A Spanish speaker who uses a trilled "r" for an English fricative "r" is guilty of phone substitution, but he does have /r/ in his English. Reinterpretation of distinctions does not add anything to the other concepts, which in my view cover it. In my article, "The Importance of Bilingual Description to Foreign Language Learning," in this same issue, I attempt to show how these concepts might be useful to the language teacher.

The reader who is familiar with *Phonemics* by Kenneth L. Pike, should note that Pike used the terms over-differentiation, and under-differentiation in a different way: to him, under-differentiation of phonemes signified neutralization of oppositions; the phoneme is under-differentiated, but the speaker is not omitting any contrast normal to the language. The term over-differentiation (of phonemes) Pike used to label situations such as spelling pronunciation which create an artificial contrast. For Pike's over-differentiation it can be said either that the phoneme is over-differentiated or that the speaker is over-differentiating, i.e., introducing a new contrast into the language.[3]

Although the treatment of phonemic aspects is most fully developed and illustrated, Weinreich also discusses two other kinds of structural interference—grammatical and lexical. He divides each of these in turn into several types and gives examples from various language contact situations. The discussion here is brief—an outline of what can be done and what remains to be done for description of interference phenomena above the phonemic level.

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[3]Kenneth L. Pike, *Phonemics* (Ann Arbor, 1947), pp. 141-142 and Glossary.

The book does not, however, restrict itself to structural interference; in the chapters called "The Bilingual Individual" and "The Socio-Cultural Setting of Language Contact" it goes on to discuss the psychological and socio-cultural stimuli which help to determine linguistic interference. The two sections of the book devoted to these topics should be of special interest to language teachers in bilingual communities.

The bibliography to *Languages in Contact* contains no less than 658 items, covering all phases of bilingualism. In addition, the reader is kept informed on virtually every page of the main text about studies previously done on every aspect of the subject matter. These features make Weinreich's book extremely valuable also as a reference guide.

In chapter V, "Research Methods and Opportunities," the author urges that further work be done toward drawing up general canons of differential description with a view to coordinating research undertaken in this area of linguistic study. Undoubtedly, language teachers trained in linguistics have a real contribution to make to bilingual theory and conversely, the descriptions by linguists working in this area can be helpful to language teachers. Such reciprocal benefits will be possible, however, only if linguists and teachers maintain contact with each other.

<div align="right">
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</div>

HORNBY, A.S. A Guide to Patterns and Usage in English.
London, Oxford University Press, 1954. 261 pp.

The author's purpose in writing this book was "to provide
information for those who are studying English as a foreign
language." Without covering the whole field of English syntax,
it gives much useful information in a clear and concise form
about certain main syntactic problems. It may not be very
useful to students (unless to very advanced ones) but for a
teacher of English it is a gold-mine.

The book is divided into five parts. The first part be-
gins with a description of how we use verbs like *be, have, do, will,*
and *can.* He calls these verbs "Anomalous Finites." Class
membership is based on the way the verbs combine with the
word *not.* Other characteristics of the group are made
clear by discussion and examples given in a series of para-
graphs called "Functions of the Anomalous Finites."

Hornby's presentation of this complicated subject is so
well done, on the whole, that I hesitate to find fault with it
on minor points. However, I would like to mention one or
two matters where there may be room for disagreement.

The table showing the forms of these verbs includes the
infinitive *do* and the participles *doing* and *done.* Although the
difference between the auxiliary *do* and the full verb of the
same form is mentioned in the discussion, it is not made
clear that we are dealing with two separate verbs. The ques-
tion I want to raise is whether the auxiliary *do* has the verbal
derivatives—infinitive, gerund, and participle. They may
appear in such expressions as "He doesn't study as much as
he gets credit for doing, or as he used to do," or "He didn't
run as fast as he could have done." But in some varieties
of English such expressions are not used; zero is substituted
in place of the *do* forms. It may be that the infinitive of the
auxiliary appears in "Do hurry!" and "I suggest that you do."
But I imagine Hornby would call these the imperative and
subjunctive.

The existence of two separate words of the same shape
is pointed out in the discussion of *need* and *dare:* "They
needn't," "He daren't," vs. "They don't need to," "He doesn't
dare to." But again in the case of the auxiliary *have* the

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examples are treated as if they were occurrences of the same verb as *have* meaning "possess." There is a brief but illuminating discussion of the latter, showing the difference between, for example, "We don't have any" and "We haven't any." This raises the question whether, in the dialects that show this distinction, there aren't actually three different verbs of the form *have*: the auxiliary as in *have seen,* the anomalous *have* meaning "possess," and another *have* meaning "undergo," as in "Did you have an operation?"

The decision to include *used* in the class of anomalous finites is unavoidable in a description of the variety of English in which is found "Usedn't he to live in Leeds?" Another grammarian might have given more prominence to the fact that in many widespread varieties of the language this verb is not on the list of anomalous finites. Hornby says only that an increasing number of speakers say "Did he use to" instead of "Used he to." Incidentally, the infinitive *use* as in the expression "Did he use to" is not given in the table of forms mentioned above.

The most valuable and, perhaps, the most interesting section of the book is the summary of verb patterns making up the remainder of Part 1 (pages 15 to 82). This material is given in the form of substitution tables like those used by Palmer and, in the U.S., by Fries and others.

The first pattern is the one with simply a verb and a direct object. He gives a variety of examples showing the range of meanings this construction may cover. Other tables show constructions like "hope to go," "ask him to go," "judge him to be," "watch him go," "make him sad," "have it done," "keep going," "keep it going," and so forth. Explanations of the meaning of the constructions and some of the possible variations are given in notes after each table. In many cases a fairly complete list is given of the commonest verbs used in each pattern. The result is a vivid ,and systematic outline of all the important verbal constructions.

Aside from the fact that this is very useful to teachers of English, it also has considerable interest for grammarians, because it is an attempt to describe part of the syntax of the language., What we have, in effect, is a classification of predicates, or rather "verbal expressions," on the basis of their internal make-up.

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Considering the work it must have been to arrange the material into the right compartments without duplication, over-lapping, or omission, one hesitates to point out inconsisten-cies. But why expressions like "intend to go," "hope to go," and "ought to go" are called Verb Pattern 2, while "long to go," "agree to go," and "care to go" are called Pattern 25A and "fail to go" is 25D is not clear. The author's comments indicate his criteria in this particular case to be semantic rather than grammatical, and his categories have not been determined on that basis. Elsewhere he seems to have classi-fied his examples by asking himself "Are the grammatical relationships the same, or are they different?" And this is what makes the work so valuable.

One error that has to be corrected is the inclusion of the sentences "What is that?" and "Who is she?" in the first part of Table 47. The interrogatives "what" and "who" are listed as subjects, and the words "that" and "she" are listed as complements. Since this same confusion has appeared recently in other books it might be well to review some of the evidence that helps to make the situation clear: Con-sider first the indirect form of these questions: "Tell me what that is" and "Tell me who she is." Here, where there is no interrogative inversion, the subject stands in front of the verb. Furthermore, if grammatical agreement is any indication, the form of the verb in "What am I?" and "Who are you?" should show that "I" and "you" are subjects rather than complements, and the sentences quoted above are per-fectly analogous. Colloquial English provides another bit of evidence. Consider the sentences "Which one is her?" and "Which one is she?" The form "her" can only be a comple-ment, but the form "she" in the latter example is the subject (although in formal style there would be some uncertainty). These two questions in indirect form turn out as follows: "Tell me which one is her." "Tell me which one she is." Finally, if we change our original questions ("What is that?" and "Who is she?") and put in "might be" instead of "is," we get "What might that be?" and "Who might she be?" In this form there can be no doubt that "that" and "she" are subjects. The error will be easy to correct. All that is necessary is to transfer the two misplaced examples to the bottom part of the table so they fall with sentences like "What are cabbages today?"

In Part 2, called "Time and Tense," the approach is unusual. Instead of giving the meanings of the tense forms, he starts with various notions such as "all-inclusive time, past time, inclusive present, inclusive past, continuing states," etc., and shows how these notions are expressed in English with the tenses and verb phrases at our disposal. This makes for a sort of unsystematic presentation, but the discussion is informative and stimulating with many examples.

Disappointingly enough no distinction was made between inflected tense forms such as *write-wrote* and the various phrasal constructions like *have written, would write,* etc. The term "tense" is used for the six traditional forms inherited from classical grammar, along with the six progressive phrases that go with them. However, this is a small matter and largely one of terminology. It does not detract from the purpose of this section, which is not to give an inventory of the verb forms but rather to show the situations in which the various forms are used.

Part 3 deals with adjectives, nouns, and pronouns. Here again, the patterns are conveniently outlined and many examples given in the form of substitution tables. Part 4 classifies adverbial expressions, partly by meaning and partly by their syntactic behavior. For example, the class of words called "Mid-Position Adverbs" has a sub-class called "Adverbs of Frequency." Part 5 is organized entirely on a semantic basis. Concepts such as "Requests," "Wishes," "Permission," "Concession," and so on, are used as headings under which the various ways of expressing them are outlined with examples and brief discussions. Finally, an index of subjects and a separate index of words add to the usefulness of the book.

Hornby's work deserves the attention of everyone interested in the English language. Without departing too much from tradition, he has treated every topic with clarity and originality. While the book could not very well be used as a classroom text, it can be recommended whole-heartedly as a handy volume of reference and as a source of ideas for lessons in pattern practice and idiomatic usage.

<div style="text-align: right;">
Harold V. King
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Norteamericano
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PUBLICATIONS RECEIVED

This list constitutes acknowledgement of all publications received by *Language Learning* not previously acknowledged. As space permits, reviews will be printed of those publications which make special contributions to the application of the principles of scientific language study to the practical problems of teaching and learning languages.

America Indigena, Mexico, Vol. XV, No. 1, 1955.

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Boyanus, S. C., *Russian Pronunciation with a Russian Reader,* Harvard University Press, Cambridge, Mass., 1955.

Cicero ad Herennium, translated by H. Caplan, Harvard University Press, Cambridge, Mass., 1954.

Cornelius, Edwin T., Jr., *Teaching English,* Washington Publications, Washington 15, D.C. (no date).

Costa, Clara Rizza, and Robinett, Betty Wallace, *La Familia Vasquez en los Estados Unidos,* Editorial del Departamento de Instrucción Pública, San Juan, Puerto Rico, 1954.

Danielsson, Bror, *John Hart's Works on English Orthography and Pronunciation,* 1551, 1569, 1570, Part I, Stockholm, 1955.

Delaune, Lynn de Grummond, *Giraffes Can Be a Trouble,* illustrated by Robin King, E. P. Dutton & Co., Inc., New York, 1955.

The English Quarterly, Manila, Vol. IV, No. 4; Vol. V, Nos. 1, 2 (Dec. 1954 - July, 1955).

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King, Harold V., *Irregular Verbs, Lessons and Oral Drills in the Important English Verb Forms,* Washington Publications, Washington 15, D.C. (no date).

Levende Talen. Nos. 177, 178, 179, 180 (Dec., 1954 - June, 1955).

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Lucius Junius Moderatus Columella on Agriculture II, translated by E.M. Forster and E. Heffner, Harvard University Press, Cambridge, Mass., 1954.

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Lucius Junius Moderatus Columella on Agriculture and Trees, III, translated by E. M. Forster & Edward H. Heffner, Harvard University Press, Cambridge, Mass., 1955.

On Expressive Language, Papers presented at the Clark University Conference on Expressive Language Behavior, edited by Heinz Werner,. (contributors: Joe Adams, Silvano Arieti, Solomon Asch, Roman Jakobson, Bernard Kaplan, Sasanne Langer, Hans Sperber, Heinz Werner), Clark University Press, Mass., 1955.

PMLA, LXX, April, June, Sept., 1955.

Sperber, Milo, *Hans und Willi,* 10 German One-act Plays, Appleton-Century-Crofts, Inc., 1955.

Taylor, Wayne W., *Ingles Nuevo Metodo,* Curso I, Instituto Chileno-Norteamericano de Cultura, Santiago de Chile, 1952.

NOTES AND ANNOUNCEMENTS

THE NATIONAL COUNCIL OF TEACHERS OF ENGLISH meets in the Hotels Commodore and Roosevelt in New York, November 22-26, 1955.

THE MODERN LANGUAGE ASSOCIATION will hold its annual meeting at the Palmer House in Chicago, December 27-30, 1955.

THE LINGUISTIC SOCIETY OF AMERICA also meets at the Palmer House in Chicago, December 29-30, 1955. A joint session of the MLA and the LSA is scheduled for the afternoon of December 29th.

THE MICHIGAN LINGUISTIC SOCIETY will meet December 3, 1955, at Albion College, Albion, Michigan, with Dean Emil Leffler, the Academic Dean of Albion College, presiding. The program will include:

> "The Formal Subjunctive in Seventeenth Century American English", O. L. Abbott, Michigan State University

> "Minimum Essentials of Phonetics and Phonemics for Teachers of English as a Foreign Language", Betty Wallace-Robinett, University of Michigan

> "The Use of Charts in the Pattern Practice of French", F. Bosco, University of Michigan

At the meeting of the Michigan Linguistic Society at Michigan State College, East Lansing, Michigan, on May 14, 1955, the following papers were presented:

> "Linguistics and the Preparation of the High School English Teacher", R. L. Wright, Michigan State College

> "The Teaching of Reading German - A Linguistic Approach", J. W. Marchand, University of Michigan

> "Kinds of Information", H. Rubenstein, Michigan State College

> "When Did English Lose Phonemically Long Consonants?", H. Kurath, University of Michigan

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"Structural Grammar and the Sixth Grade", R. J. Geist, Michigan State College

"Immediate Constituent or Expansion Analysis?" S. Chatman, Wayne University

"The Preterit and Past Participle of Strong Verbs in 17th Century American English", O. L. Abbott, Michigan State College

This was the first meeting of the Society with both morning and afternoon sessions. Its Spring Meeting is to be held in Ann Arbor in May, 1956.

THE THIRTEENTH ANNUAL LINGUISTIC INSTITUTE AT THE UNIVERSITY OF MICHIGAN was held from June 20 to August 13, 1955, under the joint sponsorship of the University and the Linguistic Society of America. As usual, work in the history and structure of the English language was given prominence. In addition, intensive language courses were offered in Modern Hebrew, Turkish, Japanese, Latin and Russian. The procedures of the linguist working under field conditions were illustrated by an analysis of one of the Filipino languages - Ilocano - using a native informant. Historical and comparative linguistics were represented by offerings in Germanic, Romance, Slavic and Indo-Iranian. In its specialized offerings the University of Michigan capitalized upon its strong tradition of applying the concepts and findings of linguistic science to practical teaching situations.

Augmenting the local staff of the Institute were the following visitors: Harry Hoijer, University of California at Los Angeles; William G. Moulton, Cornell University; Robert L. Politzer, Harvard University; John Richard Walsh, University of Edinburgh; Uriel Weinreich, Columbia University; and Francis J. Whitfield, University of California. Guest lecturers included Professor Bertil Malmberg of the University of Lund, Professor Andre Martinet and Dr. Morris Swadesh.

A little publicized but very fruitful activity of the Institute was a conference on English language courses for prospective teachers of English. Professors A. A. Hill, F. G. Cassidy, James Sledd, and Raven I. McDavid, all of whom have had experience with courses of this nature, came for a weekend

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to discuss the impact of structural linguistics on the training of English teachers. The results of these sessions will form the basis of a similar conference to be held at the annual meeting of the Modern Language Association in December.

During the summer of 1956 the Linguistic Institute will again be held at the University of Michigan - this time the only one in the United States to be sponsored by the Linguistic Society of America.

NINETY TEACHERS OF ENGLISH AS A FOREIGN LANGUAGE from forty-two countries are studying in the United States this winter - twenty-five at the University of Miami, twenty-five at the University of Texas, and forty at the University of Michigan. They are in the United States for six months under the auspices of the U. S. Office of Education and the State Department.